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USAID Conference on Agricultural Marketing and Agribusiness in Africa

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USAID Conference on Agricultural Marketing and Agribusiness in Africa

The Proceedings

Baltimore, Maryland
July 12–17, 1992

Compiled and Edited by
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Agricultural Marketing and Agribusiness Unit

Division of Food, Agriculture, and Resources Analysis
Office of Analysis, Research, and Technical Support
Bureau for Africa

USAID
U.S. Agency for International Development

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The Conference Proceedings

Foreword

In 1987, because of concerns about the general failure of development efforts in sub-Saharan Africa, the United States Congress designed a new method of assistance for the U.S. Agency for International Development (USAID), known as the Development Fund for Africa (DFA).

To implement the DFA, the USAID Africa Bureau established an Action Plan, the goal of which was defined as "broad-based, sustainable, market-led growth." To achieve that goal, the Africa Bureau identified four strategic objectives:

1. Make the public sector more equitable and efficient;
2. Make markets more competitive;
3. Improve the long-term productivity of investments; and
4. Ensure food security.

While USAID has historically devoted much attention to agricultural sector development, under the DFA those efforts have been refocused. Instead of focusing only on agricultural production and trying to increase the supply of agricultural commodities, USAID is now paying much more attention to the *demand* for agricultural commodities and focusing its efforts on promoting more efficient marketing systems with a greater role for private agribusinesses in those systems.

Indeed, in 1991 the Africa Bureau approved *A Strategic Framework for Promoting Agricultural Marketing and Agricultural Development in Sub-Saharan Africa* to help guide Missions in the design and implementation of such projects and programs.

And, in 1992, the Africa Bureau completed work on a complementary document, *A Strategic Framework for Agricultural Technology Development and Transfer in Sub-Saharan Africa*, to ensure that a *demand-driven approach* would underlie efforts to promote agricultural sector development.

The Africa Bureau also updated in 1992 its regional environmental strategy, *Plan for Supporting Natural Resources Management in Sub-Saharan Africa*, to ensure that environmental sustainability would be an integral part of all programs.

The Food, Agriculture, and Resources Analysis Division of the Africa Bureau's Office of Analysis, Research, and Technical Support (AFR/ARTS/FARA) organized this conference in 1992 to review our experience under the DFA, discuss lessons learned from our programs and projects to date, and discuss some of the innovative approaches that our field Missions are implementing at this time.

More than 80 persons actively participated in this Conference (see Appendix 1 for a full list of participants). Included were 26 direct-hire Agricultural Development Officers (ADOs) from the field Missions and Washington (more than half of the direct-hire employees in the Africa Bureau who work in agriculture). In plenary and small group sessions, participants assessed USAID Mission experience in agricultural marketing and agribusiness programs and projects, examined the results of research and analysis, and explored new approaches to marketing and agribusiness and technology development and transfer. From these sessions, a vision and eight recommendations emerged (see the ADO Conference Action Memorandum, page xi).

These Proceedings are a synthesis of what was discussed at the Conference. We are publishing these Proceedings to serve as a reference document and to give those field Mission personnel who could not attend the Conference the opportunity to read and learn from the experiences and the

analyses that were shared at the Conference.

We hope that the lessons learned and the innovative approaches that are discussed herein will prove helpful to all of us as we move forward with new agricultural marketing and agribusiness development programs and projects in the near future and that our approaches to agricultural technology development and transfer will also benefit from the important information contained herein.

We also hope that our field officers will continue to share the lessons learned from their experiences with our staff in USAID/W so that we can continue to synthesize and disseminate those important lessons to all our field Missions in sub-Saharan Africa.

Ben Stoner
Division Chief
AFR/ARTS/FARA

Ernest F. Gibson
Agricultural Marketing and
Agribusiness (AMA) Unit Leader
AFR/ARTS/FARA

Acknowledgments

The idea to convene this Conference did not emerge until February 1992. Within the space of less than five months, however, we were able to organize ourselves enough to put this Conference together.

Planning and managing the logistics involved in bringing people from all over Africa and the United States together to discuss these issues for one week in Baltimore, Maryland, involved a tremendous amount of work. For all their support in identifying a site and making all the necessary arrangements to ensure that the Conference took place in a most efficient manner, I am extremely grateful to the AMEX International staff of *Steve Kelleher, Liz Thomas,* and *Lisa Zebrowski.* Liz Thomas deserves special mention for her "hands-on" assistance during the entire Conference—working with the hotel staff and the Planning Committee and participants to ensure that everything was implemented effectively.

The planning and management of the substantive aspects of the Conference involved a tremendous amount of careful thinking by many people across several disciplines. What we would discuss and how we would discuss it were two equally important issues.

For their brilliant advice and constant encouragement on how to discuss the issues, I especially appreciate the efforts of *Bruce Kratka* and *Ian Roberts* of The Coverdale Organization.

For all their support in planning and implementing the substantive aspects of this Conference, I am deeply grateful to my colleagues in the Africa Bureau's Operations and New Initiatives (AFR/ONI) Office: *Jerry Brown* and *Karen Burress.* With their assistance and help from the U.S. Department of Agriculture's Office of International Cooperation and Development (USDA/OICD), notably *Richard Rortvedt* and *Steve Hawkins,* we were able to enjoy the enlightening presence of U.S. agribusiness executives. I am also grateful to *Mary Picard* of the AFR/ONI office for continually keeping the important issues associated with gender before us and for her assistance throughout the Conference.

I am also grateful to *Rose-Marie Depp* for helping to secure the participation of two Congressional aides in a very lively session of the Conference.

However, I am most grateful to my colleagues in the AFR/ARTS/FARA office for all of their insights and great ideas about what we should be doing at this Conference. Their relentless efforts to secure guest speakers and their tireless work to establish and implement an interesting agenda deserve great acclaim. I salute my colleagues on the Planning Committee for their terrific efforts: *George Gardner, John Gaudet, Ernest F. Gibson, Jeff Hill, Melanee Lowdermilk, Millie Morton,* and *Ben Stoner*.

Finally, I wish to acknowledge the enthusiasm and dedication of our Agricultural Development Officers who came from the field to share with us what they have learned and to ask of each other provocative questions. Without a firm commitment from our field staff, the Conference would not have been the success it was. I hope that some of their energy and enthusiasm comes across in the proceedings that follow. We learned a lot from each other and we enjoyed it, too!

Thomas J. Herlehy
Chairman, Conference Planning Committee
Agricultural Marketing and Agribusiness Unit
USAID/AFR/ARTS/FARA

Executive Summary

The ADO Conference Action Memorandum

The full text of the ADO Conference Action Memorandum is reproduced below. The Action Memorandum was presented to and discussed with both Alison Rosenberg, AA/AFR (Assistant Administrator, Bureau for Africa), and Richard Cobb, DAA/AFR (Deputy Assistant Administrator, Bureau for Africa), at the conference and transmitted to the field with their endorsement on 19 September 1992 (REFTEL: 92 STATE 307005).

USAID Conference on Agricultural Marketing and Agribusiness in Africa
Baltimore, Maryland, July 12–17, 1992

THE ACTION MEMORANDUM

The Conference

More than 80 persons actively participated in the Conference on Agricultural Marketing and Agribusiness in Africa. Included were 26 direct-hire Agricultural Development Officers (ADOs) from the field Missions and Washington (more than half of the direct-hire employees in the Africa Bureau who work in agriculture). The Conference was organized by the Africa Bureau's Office of Analysis, Research, and Technical Support (ARTS/FARA).

In plenary and small group sessions, participants assessed USAID Mission experience in agricultural marketing and agribusiness programs and projects, examined the results of research and analysis, and explored new approaches to marketing and agribusiness, and technology development and transfer. From these sessions, a vision and eight recommendations emerged.

Vision for African Agricultural Development

To raise incomes and the standard of living of African people, sustainable, environmentally-sound increases in agricultural productivity are necessary. Therefore, we promote:

- More efficient marketing systems and private agribusiness development;
- Greater utilization of more profitable technologies;
- Improved management of natural resources.

Broadly defined, agriculture includes activities from input supply to ultimate consumption: input and output marketing, production, processing, distribution, storage, transportation and export/import activities. This definition of agriculture represents a shift in orientation from a supply to a demand-driven approach--a shift that requires working more directly with private sector organizations.

Specifically, the demand-driven approach involves:

- Policy and regulatory reform to encourage the development and expansion of private agribusiness;
- Institutional strengthening and infrastructural support to increase equitable access of rural

households to markets;
- Encouraging private investments in research, extension, production and marketing activities.

Agriculture remains essential to continued economic growth in Sub-Saharan Africa because it is:

- The largest employer of men and women;
- A significant foreign exchange earner;
- A major contributor to household food security and income;
- An important source of raw materials for manufacturing.

Political changes occurring in Africa towards democratization and open market economies provide an opportunity for the realization of this vision.

Recommendations

Conference participants in A.I.D. field Missions and Washington make the following recommendations and present them to the Assistant Administrator, Bureau for Africa (AA/AFR), for endorsement and action.

1. **We recommend that the AA/AFR endorse the Vision for African Agricultural Development and charge Agricultural Development Officers (ADOs) with taking the leadership in its implementation.**

   ADOs are managing a wide array of policy and project assistance in agricultural marketing and agribusiness. Their broad-based skills enable them to serve as sectoral managers, performing policy analysis, program development and management functions. ADOs want recognition of these capabilities in career enhancement and advancement. The Africa Bureau should use the DFA to focus by sector and ensure that ADOs play a key role in policy reform and private sector activities that directly involve agriculture.

2. **The Africa Bureau should continue to provide substantial support for agricultural policy reform and expand its efforts to include regulatory and administrative reform.**

   Policy and regulatory reform create environments that promote sustainable economic growth and enable agribusinesses to prosper. In several countries, Missions have taken the lead in supporting market liberalization and in promoting the movement of agricultural commodities into domestic, regional and international markets.

3. **African Missions should continue to emphasize host country ownership in the design of agricultural reforms and agribusiness programs.**

   Host country ownership of policy, institutional and regulatory reforms ensures political will and commitment to policy implementation. In some countries, Missions have succeeded in instilling a strong sense of public and private sector ownership in the design and implementation of agricultural reforms and in the development of agribusiness.

4. **The Africa Bureau should continue to promote the development of agribusiness and trade with domestic, regional and international markets, using innovative and environmentally-sound approaches.**

   In addition to an enabling policy environment, agribusiness development requires improved technology, access to financial services and markets, and timely information. In several countries, Missions are implementing a variety of approaches: management consulting services; trade and investment centers; business support facilities; information networks; and free trade zones. The Africa Bureau should evaluate these experiences, highlight the most promising strategies, disseminate findings to Missions, and encourage maximum application of lessons learned.

   A Strategic Framework is available to

assist Missions in developing agribusiness and marketing activities. Networking among Missions will facilitate its application and refinement.

5. **African Missions and ARTS/FARA should collaborate in improving data collection and analysis systems and information dissemination to better support agriculture in its broadly-defined role.**

   Improved qualitative and quantitative information systems are needed to support agribusiness development. Better documentation of achievements will illustrate the impact of U.S. investments in African agricultural development. ARTS/FARA should explore options for standardizing the collection and dissemination of stories illustrating progress in order to share Mission achievements more broadly.

6. **The Africa Bureau and Missions should foster the wider availability of equitable financial services to support agricultural development.**

   Access to adequate capital is key to the expansion of agribusiness and marketing activities. In several countries, Missions have promoted innovative formal and informal saving and lending facilities that support male and female producers, traders, input suppliers, entrepreneurs, processors, transporters and exporters.

7. **Missions and the Africa Bureau should provide support for demand-driven agricultural research with a commodity/subsector orientation.**

   The increased utilization of agricultural technology is a key condition for increasing productivity. For the successful development and transfer of profitable technologies, public and private sector should collaborate using a commodity/sub-sector orientation.

8. **The Africa Bureau should provide the following assistance in carrying out the above recommendations: agribusiness training and travel funds for U.S. direct-hire employees; documentation of agribusiness resources available to Missions from A.I.D. offices in Washington, U.S. private sector, and relevant U.S. Government agencies.**

   A.I.D. should explore innovative ways to better use existing resources. ARTS and ONI should take the lead for the Africa Bureau in directing an inter-Bureau working group to develop specific recommendations with regard to: providing training in agribusiness development for ADOs and other Mission personnel; and improving the documentation and dissemination of resources available.

Conference Proceedings

A synthesis of conference proceedings will be published. Single copies will be available on request from the Africa Bureau's Office of Analysis, Research and Technical Support, Division of Food, Agriculture and Resource Analysis (ARTS/FARA), Agency for International Development, Room 2941 N.S., Washington, D.C. 20523. FARA is following up on conference recommendations and will communicate periodically with field officers on progress.

21 July 1992

Glossary of Acronyms and Abbreviations

AA/AFR	Assistant Administrator / Bureau for Africa (USAID)
ABS	annual budget submission
ACP	Africa, Caribbean, and Pacific (countries eligible for special consideration from the EEC under the Lome Convention
ADO	Agricultural Development Officer
AFR	Bureau for Africa (USAID)
AGR	Office of Agriculture (USAID/R&D)
AMA	Agricultural Marketing and Agribusiness Unit (USAID/AFR/ARTS/FARA)
AMC	Action Memorandum Committee
AMIS	Agricultural Marketing Improvement Strategies
AMIT	Agricultural Marketing and Technology Transfer
ANEP	Agricultural Nontraditional Export Promotion Program (Uganda)
APDF	African Project Development Facility
API	Assessment of Program Impact
APSP	Agricultural Policy Support Program
ARR	average rate of return
ARTS/FARA	Office of Analysis, Research, and Technical Support / Division of Food, Agriculture, and Resources Analysis (USAID/AFR)
ASAP	Agricultural Sector Assistance Program
ATI	Appropriate Technology International
BIFAD	Board for International Food and Agricultural Development
BS 10	Backstop 10
CAAS	Cooperative Agriculture and Agribusiness Support
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources (Zimbabwe)
CFAF	CFA franc (unit of currency used by member countries of the West African Monetary union)
CILSS	Comité permanent inter-états de liaison de lutte contre la sécheresse dans le Sahel
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo
CLUSA	Cooperative League of the United States of America (former name of the National CooperativeBusiness Association, NCBA)
CMDT	Compagnie malienne de développement textile (extension service, southern Mali)
CPSP	Country Program Strategic Plan
CRSP	Collaborative Research Support Program
CSAM	Commodity Systems Assessment Methodology
DAA/AFR	Deputy Assistant Administrator / Bureau for Africa (USAID)
DAI	Development Associates, Inc.

DFA	Development Fund for Africa
DHV	Development of the Haute Vallée (Mali)
DNSI	National Statistice Office, Mali
ECOWAS	Economic Community of West African States
EEC	European Economic Community
EER	Employee Evaluation Review
EIR	Environmental Impact Review
ENV	Environmental Protection Unit (USAID/AFR/ARTS/FARA)
EPADU	Export Policy Analysis and Development Unit (Uganda)
ERS	Economic Research Service (USDA)
ESA	East and Southern Africa
FAS	Foreign Agricultural Service (USDA)
FDA	Food and Drug Administration
FEWS	Famine Early Warning System
FSP	Food Security and Productivity Unit (USAID/AFR/ARTS/FARA)
FSSRP	Fertilizer Sub-Sector Reform Program (USAID)
GC	General Counsel (USAID)
GDP	gross domestic product
GEPC	Ghana Export Promotion Council
GIC	Ghana Investment Center
GO__	Government of _____
HAACP	hazard analysis critical control point
HINS	Heinz Institute of Nutritional Sciences
IARC	International Agricultural Research Center
IESC	International Executive Service Corps
IICA	Inter-American Institute for Cooperation on Agriculture
IMF	International Monetary Fund
INSORMIL	INternational organization that conducts research on new varieties of SORghum and MILlet
ISNAR	International Service for National Agricultural Research
KSI	Kgalagadi Soap Industries
LISA	longitudinally integrated safety assurance
LOME	The Lome Convention
MDI	Marketing Developing and Investment
MEP	Monitoring and Evaluation Plan
MRP	Office of Management Resources Planning (USAID/AFR)
MRR	marginal rate of return
MTT	Ministry of Trade and Tourism (Ghana)

NARS	National Agricultural Research System
NCBA	National Cooperative Business Association (formerly, the Cooperative League of the United States of America, CLUSA)
NGO	nongovernmental organization
NPA	nonproject assistance
NTE	nontraditional exports
OE	operating expenses
OECD	Organization for Economic Cooperation and Development
OHV	Opération de la Haute Vallée (Mali)
OICD	Office of International Cooperation and Development (USDA)
OIT	Office of International Training (USAID/R&D)
OMB/AID SWAT	joint Office of Management and Budget / USAID "SWAT" team, examining management issues for USAID
ONI	Office of Operations and New Initiatives (USAID/AFR)
OPAM	Office des produits agricoles au Mali (Malian cereals marketing board)
OPIC	Overseas Private Investment Corporation
PAAD	Project Assistance Authorization Document
PARTS	Policy Analysis, Research, and Technical Support Project
PMA	Produce Marketing Association
PP	Project Paper
PRAMS	Policy Reform in the Agricultural Marketing Sector
PRE	Bureau for Private Enterprise (USAID)
PVO	private voluntary organization
R&D	Bureau for Research and Development (USAID)
RASS	Rapid Appraisal Subsector Studies
REDSO	Regional Economic Development Support Office
RFP	Request for Proposal
ROR	rate of return
RSA	Republic of South Africa
SADCC	Southern Africa Development Coordination Committee
SME	small- and medium-sized enterprise
SOE	state-owned enterprise
SPAAR	Special Program for African Agricultural Research
T&V	training and visit (Agricultural Extension System methodology)
TDT	Technology Development and Transfer Unit (USAID/AFR/ARTS/FARA)
TDY	temporary duty
TFEA	Tropical Forestry Environmental Assessment
TIP	Trade and Investment Promotion
TQM	total quality management
TRIPSS	Togo Rural Institutions and Private Sector Support

UNDP	United Nations Development Program
USAID	U.S. Agency for International Development
USAID/W	USAID / Washington, D.C., office
USDA	U.S. Department of Agriculture
VOCA	Volunteers in Overseas Cooperative Assistance
WID	Women in Development
WRI	World Resources Institute

The Conference Proceedings

July 12, 1992 (Sunday):

Welcome Dinner

Moderator: Ben Stoner, Chief, AFR/ARTS/FARA
Keynote Address:
Richard A. Cobb, DAA/AFR
Hans (Pat) Peterson, Director, R&D/AGR

Dick Cobb

This conference is the first opportunity for Africa Bureau Agricultural Development Officers (ADOs) to get together in almost three years. The last ADO Conference was in Annapolis, Maryland, in September 1989.

There have been a lot of changes in the structure of USAID and the Africa Bureau since 1989, and this Conference gives us an opportunity to talk about how we can work more closely together to meet the challenges posed by the reorganization.

The reorganization provides you ADOs with a unique opportunity to exert your influence. The creation of ARTS/FARA, for example, indicates that the Bureau is committed to compiling lessons learned from your experiences as ADOs, to synthesizing that information and disseminating it to you and your colleagues, so that we can improve our programs and projects in the agricultural sector.

The Development Fund for Africa (DFA) calls for Missions to *focus* their country programs and strategies. One of the potential areas of focus could be the theme of this conference: agricultural marketing and agribusiness development.

I hope that over the next five days, as you deliberate and discuss this important theme, you will come up with some *specific recommendations* for the Agricultural Development Officers in the field and for the Africa Bureau management here in USAID/Washington.

This conference also provides you with an excellent opportunity to begin gathering the information that the Africa Bureau will need to make our five-year DFA Report to Congress early in 1993. I urge you to cooperate with your ARTS/FARA colleagues and share your success stories with them.

Pat Peterson

I am glad to see the Africa Bureau convene this conference to explore the theme of agricultural marketing and agribusiness development. However, I urge you to maintain balance in your approach to the agricultural sector and not jump on board the "agribusiness" bandwagon to the neglect of other important themes. "Agribusiness development" is the most current buzzword and hottest topic of interest among a variety of USAID managers. But we have all seen trends and bandwagons come and go.

As you deliberate over the next five days, I hope that you will *explore strategies by which we can make effective links between agricultural marketing and agricultural technology.* As ADOs, we should be aware of the need for appropriate technology to make marketing systems and agribusiness operate more efficiently.

We should also take this opportunity to reflect on our strengths as ADOs—our range of contacts throughout the agricultural sector. We should use the information we get from such contacts to

contribute to the design and implementation of nonproject assistance (NPA) Programs so that we get the experience managing NPA that we need to get promotions. And *we should be thinking creatively about how to link NPA with project activities in the agricultural sector, not just for marketing reform, but for the reform of agricultural research systems, agricultural colleges in Africa, Ministries of Agriculture, and the like.*

This Conference provides an excellent opportunity for you, as ADOs, to exercise some leadership, to start steering the Africa Bureau in the direction in which you believe it should be headed, rather than playing a passive role and waiting to be taken this way or that way. I wish you success in your efforts during this conference.

July 13, 1992 (Monday)

Theme: *Lessons Learned from USAID Mission Experience in Agricultural Marketing and Agribusiness Programs and Projects*

Session 1: THE PURPOSES OF THE CONFERENCE

Purpose of the Session:
To reach consensus on the purposes of the Conference and to nominate the ADO Action Memorandum Committee (AMC).

Moderator: Thomas J. Herlehy, AFR/ARTS/FARA AMA Unit
Presentations: Jerome Wolgin, Director, AFR/ARTS: "The Purposes of the Conference"
Ben Stoner, Chief, AFR/ARTS/FARA: "The Action Memorandum Committee"
Tom Herlehy, AFR/ARTS/FARA/AMA: "Operations and Logistics"

Jerry Wolgin: "The Purposes of the Conference"

We want to get feedback on strategic issues and procedural matters related to the theme of agricultural marketing and agribusiness development during this conference. We also want to explore the links between agricultural marketing and agricultural technology development and transfer.

While the conference focuses on marketing and agribusiness development, we want to keep in mind and link our approaches to sound natural resources management techniques so that we contribute to sustainable, environmentally sound economic development.

We hope to use this conference to improve communications between the field Missions and USAID/W.

We want to build on what we have discussed at previous Conferences, the last in Annapolis, Maryland, in September 1989.

We want to examine the effects of the current drought on marketing reform in drought-affected areas of South and Eastern Africa.

We want to link marketing and agribusiness to democratization and security because private enterprise involves popular participation in economic activity.

We want to capture your success stories so that we can disseminate and learn from them.

Finally, we welcome your ideas on how we can influence USAID policy, make better reports to Congress and forge better relations with the U.S. Congress so that we can maintain support for our development programs.

Ben Stoner: "The Action Memorandum Committee"

We would like volunteers from among the ADOs who will form a Committee that will be responsible for drafting an *ADO Conference Action Memorandum*. Millie Morton (AFR/ARTS/FARA) has volunteered to help facilitate the work of the Action Memorandum Committee (AMC).

The purpose of the *ADO Conference Action Memorandum* is to articulate our vision of the agricultural sector and its role in the development process and to describe the actions that we believe

are necessary to achieve that vision through agricultural marketing and agribusiness programs and projects.

We anticipate that the *ADO Conference Action Memorandum* will:

- identify the lessons learned from the Conference: what is working well (success stories, in principle and in practice), and what we can do better (in principle and in practice);
- identify the specific actions that we, as ADOs, can take to improve the design, management, and implementation of agricultural marketing and agribusiness programs and projects; and
- give specific recommendations for action by Africa Bureau management.

The *ADO Conference Action Memorandum* will be drafted in a memo format to be presented by the ADO Conference participants to John Hicks (DAA/AFR) or Dick Cobb (DAA/AFR) on Thursday afternoon.

We plan to discuss the *ADO Conference Action Memorandum* with John Hicks or Dick Cobb to secure their concurrence to its recommendations so that it can be sent out to the field in the form of a reporting cable to the Mission Directors and other ADOs who were not able to participate in the Conference.

To help the Action Memorandum Committee, the facilitators will be leading us in a discussion after every session during which we will try to capture information for the *ADO Conference Action Memorandum*.

The Action memorandum Committee will meet daily, probably in the evening, at open-door sessions, which will be announced before we adjourn at the end of each day. Conference participants are invited to come and meet informally with the Action Memorandum Committee.

ADOs who volunteered to be members of the ADO Conference Action Memorandum Committee are:

- Joanne Hale (ADO, USAID/Malawi).
- Larry Harms (ADO, USAID/Mali)
- Thomas D. Hobgood (ADO, USAID/Kenya)
- John McMahon (ADO, USAID/Cameroon)

Session 2: THE ROLE OF THE AGRICULTURAL SECTOR IN GENERATING ECONOMIC GROWTH

Purpose of the Session:

To respond to the Mission ADOs' request for more information about the importance of agricultural marketing and agribusiness development in the Development Fund for Africa and to raise consciousness among ADOs regarding their important role as catalysts of economic growth.

Moderator: Curt Reintsma, ADO, USAID/Lesotho
Presentation: Ben Stoner, Chief, AFR/ARTS/FARA

Ben Stoner: "The Africa Bureau Vision of the Agricultural Sector and Current Funding Levels"

AFR/ARTS/FARA has developed a vision of the agricultural sector for the Africa Bureau; the objective tree (Figure, p. 7) illustrates that vision.

The *goal* of our programs in the agriculture and natural resources sector is to contribute to sustainable, broad-based, market-oriented growth.

The *subgoals* of our programs are to increase the contribution of the agricultural sector to sustained economic growth and to contribute to broad-based improvements in food security among African households.

The *strategic objective* of our programs is to achieve sustained increases in agricultural productivity.

The three *strategies* that we believe will lead to this objective are:

- increasing the utilization of higher-yielding technologies,
- improving management of the natural resources base and physical environment, and
- promoting more efficient and lower-cost marketing systems with a greater role for private agribusinesses.

The AFR/ARTS/FARA office has developed three *Strategic Frameworks* to assist the Bureau and our field Missions develop sound approaches for these strategies. Two of the Strategic Frameworks will be presented during this Conference.

These documents provide guidance on the kinds of analyses needed to design sound programs and projects and suggest illustrative indicators for monitoring and evaluating the impact of such activities, including the preparation of Assessment of Program Impact (API) reports.

USAID funding for agricultural and natural resource development activities under the DFA has recently averaged about $200 million per year. Graphs and charts developed by our office illustrate the funding for these agricultural sector targets between fiscal years 1990 and 1993 (Figures, pp. 9–10).

As the pie chart illustrates, *the agriculture and natural resource sector received a combined total of 27 percent of all DFA funds between FY 1990 and FY 1993.*

However, the pie chart does not capture all agricultural sector programs because, as you know, *many of the "private-sector" designated programs are agricultural marketing liberalization programs*, which support private sector (e.g., agribusiness) development.

Policy reform programs that liberalize agricultural marketing systems, projects that involve the privatization of state-owned enterprises, activities that support private agroprocessing and strengthen the ability of Ministries of Commerce

to facilitate nontraditional agricultural export promotion activities, are all directly related to *the agricultural sector.*

The new reporting codes and the subjective perspectives of the Mission Officers who write the reports classifying programs and projects, often means that agricultural sector activities, especially marketing and agribusiness, are often reported as "private sector" programs and projects, not as agricultural marketing or agribusiness programs and projects.

Another pie chart illustrates the breakdown of DFA funds within the agricultural sector. As you see from the pie chart, *agricultural marketing and agribusiness programs and projects received 26 percent of the total funds for the agricultural sector.*

These percentages also probably do not capture fully the total percentage of funds going to agricultural marketing and agribusiness programs and projects within the agricultural sector budget. One category in particular—*Agricultural Management, Planning, and Policy* programs and projects, which comprise 24 percent of the sector's funds—is very often an acronym for agricultural marketing programs and projects. Perhaps half, or 12 percent, of these programs and projects are related directly to agricultural marketing development.

Moreover, agricultural credit programs, which comprise 3 percent of the sector's activities, also relate directly to marketing since most credit programs are associated with production of specific commodities for the market.

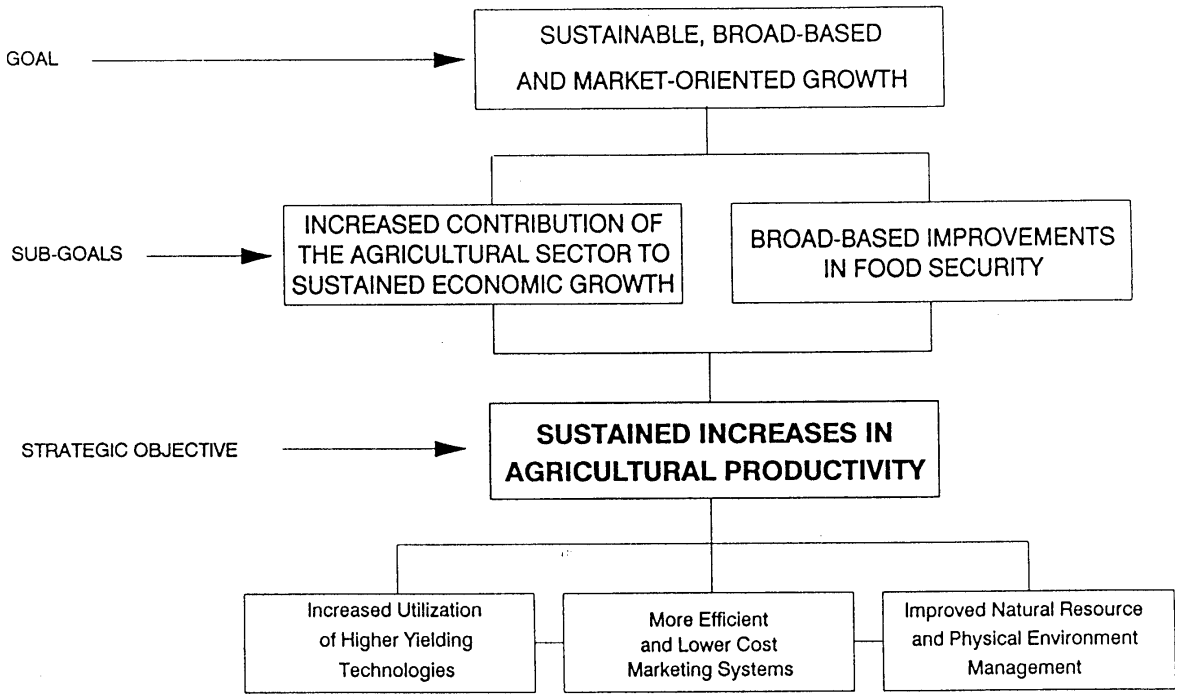
Hence, agricultural marketing and agribusiness programs and projects account for a minimum of 26 percent, but probably closer to 40 percent of all agricultural-sector-funded activities.

I would also like to point out that *agricultural technology development and diffusion account for 15 percent of the agricultural sector's programs under the DFA for the years FY 1990-93*. We will be having a full day of sessions dealing with this important topic on Thursday, because of the inexorable links between marketing and technology.

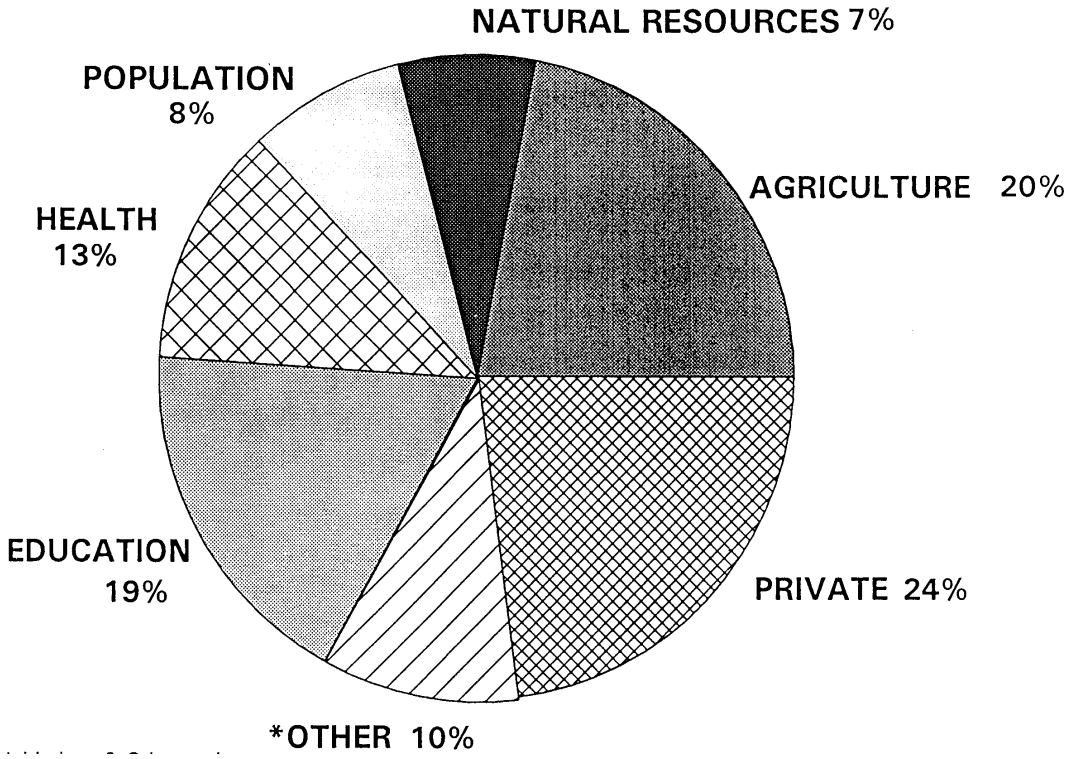
We have also made a bar graph to illustrate which are the top 10 funded programs in agricultural marketing and agribusiness development, according to figures collated by AFR/DP covering the FY 1990–93 period as well.

Africa Regional programs covers all centrally funded programs, projects, and activities, including AFR/ONI and AFR/ARTS efforts in agricultural marketing and agribusiness development.

Objective Tree: Agriculture and Natural Resources Sector

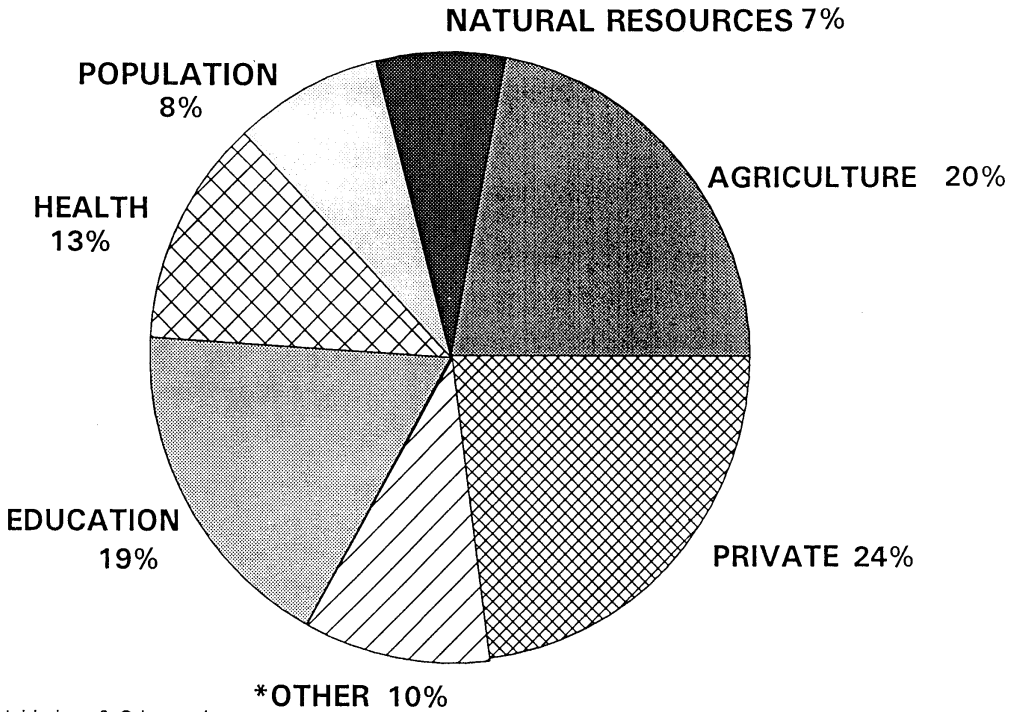


DFA Total Percentage Allocations: FY 1990–93



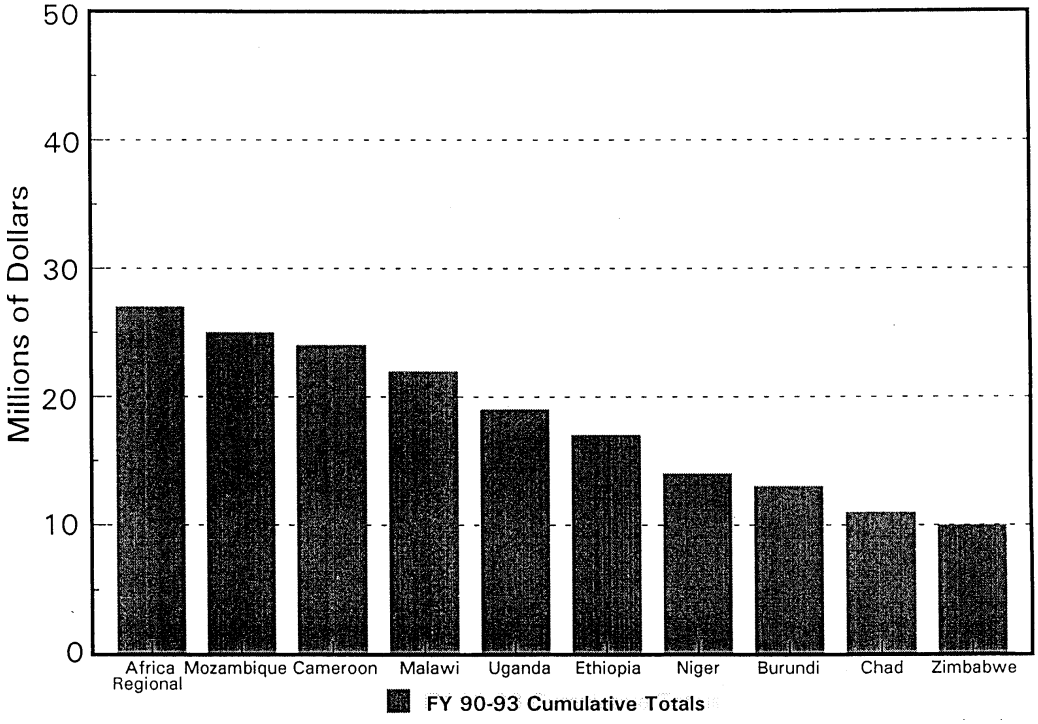
DFA Percentage Allocations: FY 1990–93

Agriculture and Natural Resources



Africa Bureau's DP OYB Funding

Top 10 Countries with Agribusiness and Marketing–Funded Activities



Session 3: Agricultural Transformation in Africa: Lessons Learned from the USAID–Winrock II Conference (May 1992)

Purpose of the Session:
To disseminate lessons learned at the Africa Bureau Seminar for senior management on "Agricultural Transformation in Africa."

Moderator: Tom Hobgood, ADO, USAID/Kenya
Presentations: Jerome Wolgin, Director, AFR/ARTS: AFR Bureau Perspectives
Steve Block, Abt Associates: Agricultural Sectoral Issues
Carl Liedholm, MSU: Micro-Enterprises and Household Issues

Jerry Wolgin: "Results of the Seminar on Agricultural Transformation in Africa"

The AFR/ARTS Office, the Center for Economic Policy Studies of Winrock, and the USAID Environmental Policy and Natural Resources Training Project sponsored a seminar on "Agricultural Transformation in Africa," May 27–29, 1992, here in Baltimore, Maryland.

The seminar tried to define agricultural transformation, determine what is happening in rural areas, examine the linkages between the agricultural and nonagricultural sectors that can foster accelerated economic growth, and analyze what needs to be done to promote the transformation of agriculture in Africa.

No formal definition emerged, but there was agreement that *an agricultural transformation has six characteristics*:

1. Rural households have incomes exceeding poverty levels.
2. Farms are operated commercially, selling a substantial portion of total output.
3. Farm production is specialized.
4. Rural households invest more in their farms.
5. Rural households purchase commercial inputs, including labor, in significant quantities.
6. Farmers adopt new technologies on a regular basis.

U.S. Department of Agriculture Economic Research Service (USDA/ERS) data suggest that agricultural productivity in Niger is rising. However, World Bank data do not show such growth. This has implications for Niger because the World Bank sets policy priorities for the donors, whereas USDA/ERS does not.

Seminar participants agreed that we do not know what really is happening all across rural areas of Africa because the macroeconomic and microeconomic data are telling us different stories.

But *two pessimistic trends* seem clear:

First, *Africa's population is doubling every 25 years* and will continue to do so for the foreseeable future, no matter how successful our family planning programs are.

This means that economies will have to grow a minimum of 3 percent per annum just to maintain current living standards.

Second, *Africa's ecological decline will be difficult to arrest* or even slow down.

On the other hand, *some positive results have emerged*:

- There is no clear, widespread evidence that malnutrition is increasing.
- Life expectancy is increasing in Africa.

- Food prices seem to be declining.
- Average productivity of labor in agriculture is increasing as rural households increase their nonfarm activities.
- Rapid adoption of new seeds and fertilizers seems to be taking place in a number of countries with reforming economies.

However, there are two caveats regarding the price of food and the size of the agricultural sector:

First, *the poor majority in Africa typically spend more than 50 percent of their incomes on food.* Therefore, food prices must remain low so that wage rates can remain low, especially given Africa's low labor productivity; otherwise Africa will be unable to compete in highly competitive world markets.

Second, *the larger the size of the agricultural share of gross domestic product (GDP), the more important is the agricultural sector's rate of growth to economic growth.* Thus, a growth strategy might differ across countries and regions.

Africa, like Asia, needs to get agricultural growth going first before there can be rapid economic growth. But, there are differences between what happened in Asia in the 1950s and 1960s and what is happening in Africa in the 1980s and 1990s:

AFRICA	**ASIA**
Multicropping on farms	Monocropping on farms: rice
Low population densities	High population densities
Variable production rates (variable rainfall patterns)	Stable production rates (irrigated agriculture)
Urban food tastes that tend to differ from the predominant rural crops	Urban food tastes that tend to be the same as the predominant rural crops
Low world food prices	High world food prices
Mobile world capital markets	Staid world capital markets
Scarce investment capital	Abundant investment capital
Poor, thin soils	Rich, deep soils

Cornell University studies on the Impact of Structural Adjustment on the poor indicate that real food prices are *declining*. For example, in Ghana, food prices began to decline *before* the structural adjustment program was initiated, but the decline in prices accelerated *after* the program was underway.

This illustrates the relative lack of a complementary relationship between rural productivity and urban food prices in Africa and the lower returns on agricultural investments in Africa.

Nevertheless, the seminar participants agreed that accelerating agricultural growth and transformation in Africa is possible because:

- Productivity-enhancing agricultural technologies are on the shelf waiting to get into the hands of farmers.
- Public extension services have failed to deliver new technologies, and while the private sector may deliver *embodied* technology (e.g., fertilizer and hybrid seeds), no one is sure who will deliver *disembodied* technologies.
- Rural credit schemes and cooperatives have been a failure.
- Market liberalization is a success that should continue to be supported. Promoting competitive marketing, reducing transaction costs, and improving links between urban and rural areas are all important in generating agricultural growth.
- Infrastructure, especially for marketing, is clearly important and interventions can help reduce transaction costs.
- The quality of donor aid programs, especially in agriculture, needs to be improved so that scarce resources are not wasted.

Steve Block: "Sectoral Issues in Agricultural Transformation"

The focus on agricultural productivity comes from developmental theory, which suggests that *growth in the agricultural sector is critical to generating total economic growth.* That is, with increases in agricultural productivity, especially through technological change, capital and labor can be released to other sectors of the economy, especially the industrial or manufacturing sector and services sector. The release of such labor and the generation of excess capital in the agricultural sector, which can be invested in other activities—especially agroprocessing—can lead to broader economic growth. But without gains in total agricultural productivity, the agricultural sector cannot be the engine of growth for the whole economy.

Therefore, the question that we are analyzing is: Has there been an agricultural transformation in Africa?

Put another way, have the factors of production (i.e. land, labor, capital, and management) combined in some way to increase agricultural productivity in sub-Saharan Africa?

To answer this question, *total factor productivity growth rates for five key commodities have been analyzed for sub-Saharan Africa: maize, coffee, cotton, rice, and roots and tubers.* Sub-Saharan Africa is also divided into five regions for purposes of analysis: the Sahel, East Africa, Coastal West Africa, Southern Africa, and Central Africa. The productivity growth rates on the accompanying Figures (pp. 14–16) have been calculated for two recent 10-year periods: from 1968 to 1978, and from 1978 to 1988.

These graphs illustrate that an agricultural transformation is occurring in Africa. Despite low total-factor-productivity levels for most commodities during the 1970s, many African countries and commodities experienced growth in total factor productivity on an annual basis during the 1980s.

In fact, *maize demonstrated robust factor productivity growth in both the 1970s and the 1980s* in most regions of the subcontinent (Figure, p. 14). Only in Southern Africa was annual total factor productivity growth for maize negative in the 1980s, whereas neighboring Central Africa had more than 3 percent annual growth in total factor productivity for maize.

Data collected in Kenya indicate that a variety of factors contributed to the rise in maize productivity, including new varieties and technological change. Ironically, the marketing infrastructure created to promote traditional export crops, such as cotton and coffee, also helped support increases in maize productivity and marketing.

Traditional exports crops, such as coffee and cotton, have had mixed results.

Coffee total factor productivity growth declined in every region in Africa during the 1980s from what it was in the 1970s (Figure, p. 15). This disturbing trend not only reflects the relatively recent decline in international coffee prices; it also reflects the almost total collapse of the state-owned coffee marketing systems of Africa and the bankrupt government research and extension systems for this important export crop.

Cotton total factor productivity growth rates, however, were enormous between the 1970s and 1980s (Figure, p. 15). In every region of the subcontinent, except Central Africa, cotton total factor productivity growth rates for cotton were all above 2 percent per annum.

Unlike coffee, most cotton marketing boards and cooperatives performed relatively well throughout the subcontinent. In addition, new technology and strong extension and sound marketing services have contributed to the relatively rapid increases in productivity.

Other food crops, such as rice and roots and tubers, have had mixed results between periods and among regions.

Rice experienced phenomenal growth rates in the Sahel during the 1980s, with Southern and Western Africa also demonstrating strong annual total factor productivity growth rates (Figure, p. 16). Among the reasons for this growth are the significant investments in irrigation and the introduction of higher-yielding varieties of rice. On the

other hand, in both East and Central Africa, there has been a significant decline in annual total factor productivity growth rates with rates falling into the negative percentiles for the 1980s for those two regions.

Roots and tubers are very important staple food commodities in West, Eastern and Central Africa, yet the annual growth rates for these commodities have not been very significant (Figure, p. 16). While total factor productivity growth rates have been negative in only one instance, during the 1980s, the Sahel growth rates declined in most regions.

Only in Eastern Africa did roots and tubers experience a relatively high annual growth rate in total factor productivity during the 1980s. For example, while growth rates were positive for Southern and Central Africa during the entire period, the growth rates declined during the 1980s from what they had been during the 1970s.

These slow growth rates are attributable to the relative lack of innovative research, technological change and improvements in the marketing system, especially in storage and transport.

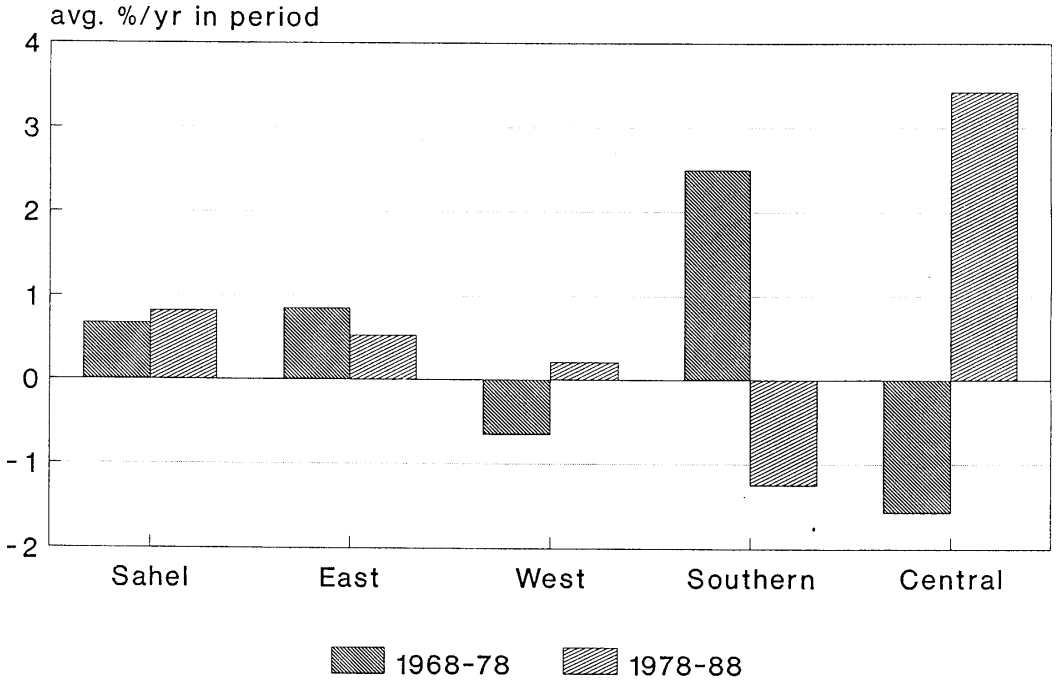
Carl Liedholm: "Microenterprise and Household Income"

Most rural households are net food purchasers involved in many economic activities; nonfarm rural activities include trading, manufacturing textiles or wooden products, or processing foods and beverages.

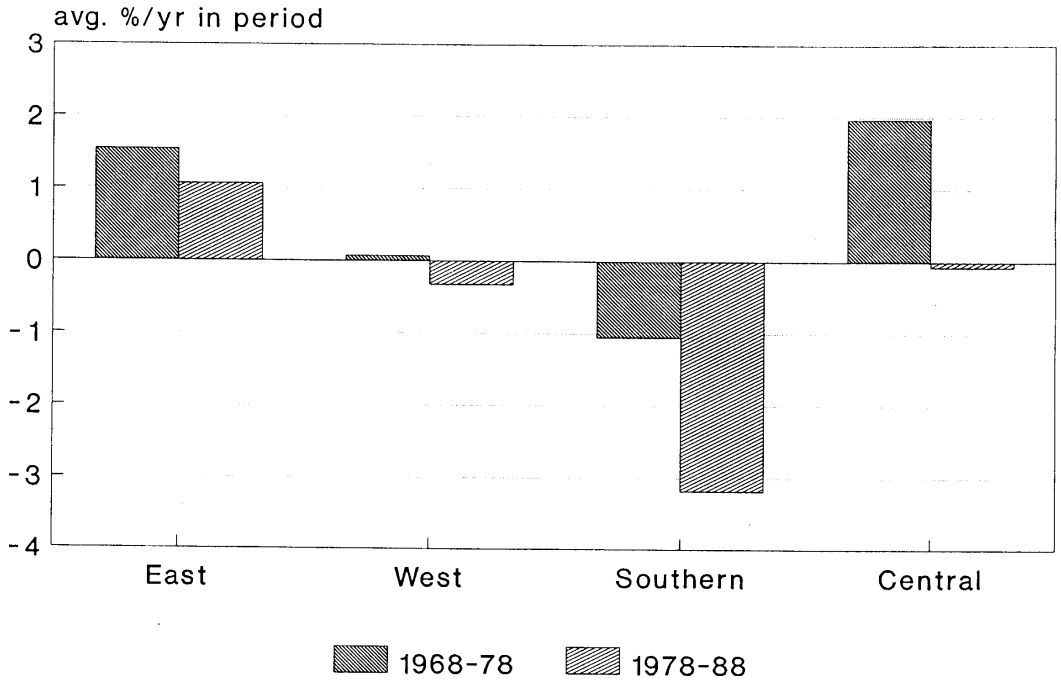
Employment in these activities in rural areas is *large* but the sizes of the agribusinesses are *small*. Small- and medium-sized enterprises (SMEs) tend to employ 10 people or fewer. *Studies show that there is higher labor efficiency in these SMEs than in the larger firms.* But growth only takes place in about one-third of those SMEs. These SMEs are worthy of USAID support.

SME growth depends on the amount of training the owner and employees get, the age of the

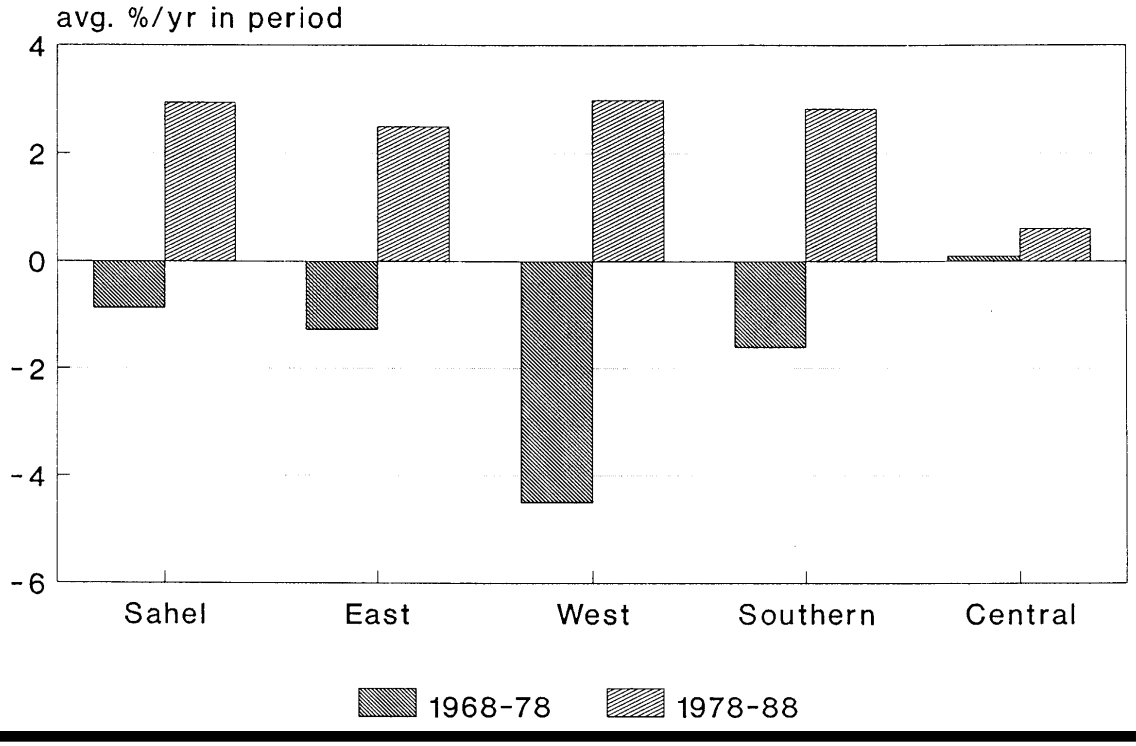
TFP Growth by Region: Maize



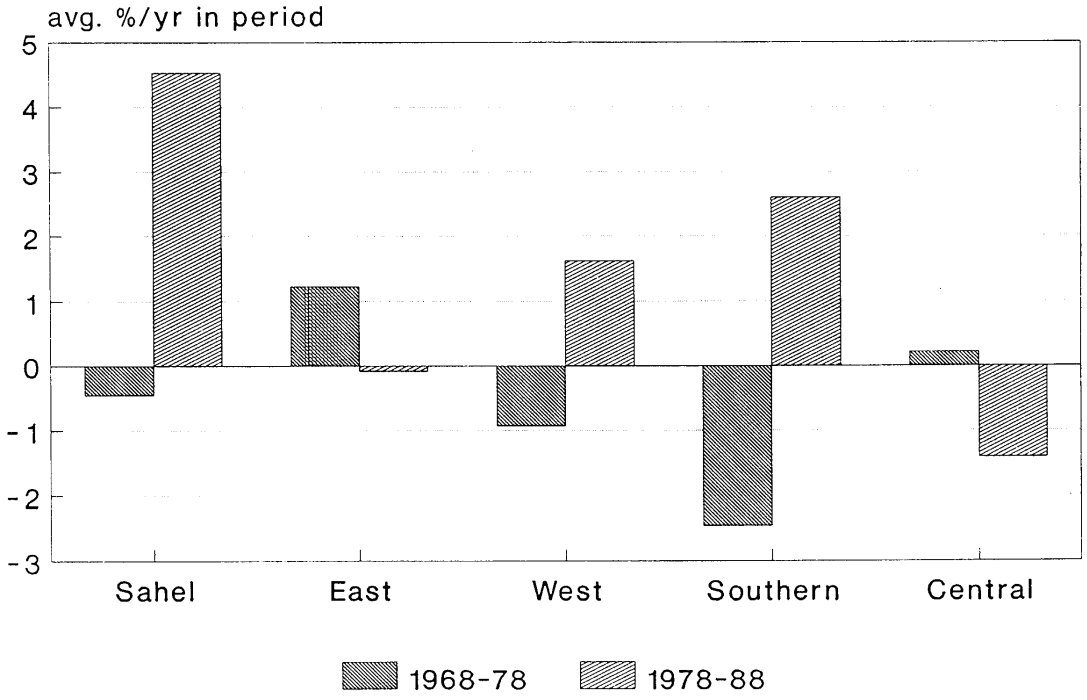
TFP Growth by Region: Coffee



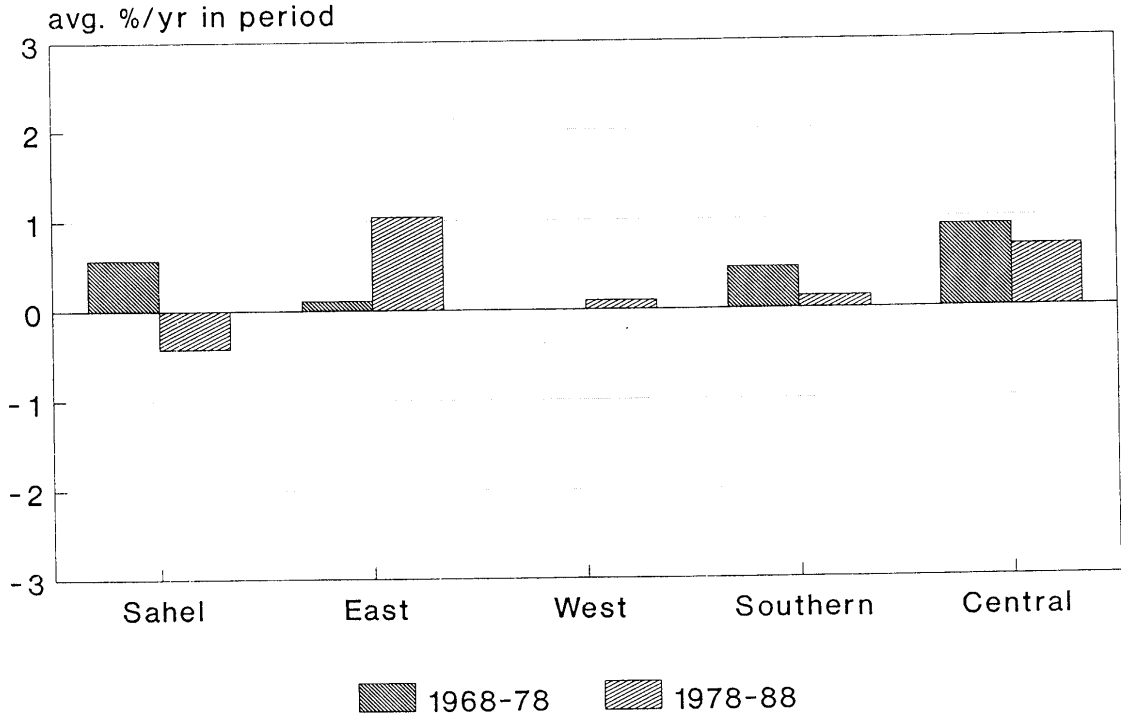
TFP Growth by Region: Cotton



TFP Growth by Region: Rice



TFP Growth by Region: Roots and Tubers



firm and its location, and the sector in which the firm is active.

Successful growth of SMEs varies by country and by commodity systems. The dynamism of this sector is not captured by the macroeconomic data kept by the World Bank or sub-Saharan African governments. SMEs are one of the most dynamic sectors in the economy. Most of the consumer goods that rural households buy are manufactured by those rural SMEs, including food, furniture, and agricultural tools.

There is a clear link between the agricultural sector and these microenterprises in the demand for and the supply of goods and services. Indeed, some of the annual growth in total factor productivity, which has just been illustrated by Mr. Block, may well have been caused by the increase in demand for and supply of inputs that were manufactured by these small- and medium-sized enterprises in rural areas.

However, government policies and regulations tend to discriminate against the SMEs. In Zimbabwe, for example, the small maize mills are very efficient, indeed much more efficient in processing maize than the larger mills. But the government sets the price of maize sold to the mills and, as a result, the large, inefficient mills are able to buy maize at a *lower* price than the small, more efficient mills. This is not a sound policy because it makes it more difficult for the smaller mills to compete with the larger ones.

Thomas D. Hobgood: "Summary of Session 3"

Based on the discussion generated by this session, we have captured the following information on what some of USAID's *successes* have been, what *improvements* we have made or could make in our programs, which *innovations* still need to be explored and what *difficulties* we are facing.

Successes

1. Several Missions have developed *Market Information Systems.*

2. *Rwanda* is collecting data and creating the capacity to maintain and periodically up-date that data base.

3. *Kenya* is collecting microeconomic household data.

4. *Mali* is collecting marketing information through its Cereals Marketing Assessment and Famine Early Warning System (FEWS).

5. *USAID/W* is collecting household level data through the Cornell University project on the Impact of Structural Adjustment on the Poor.

6. USAID tends to focus on microeconomic data, while the World Bank focuses on macroeconomic data.

Improvements

1. The *new definition of the agricultural sector* is more accurate: agriculture involves more than on-farm production; it also involves the collection, grading, sorting, handling, storage, transport, processing, packaging, and wholesale/retail sale of agricultural commodities.

2. We need to obtain better data, disaggregated by gender, in the field and communicate that to USAID/W.

3. We need better methods of reporting on the agricultural transformation in Africa because the APIs may not be the best means of doing so.

4. We need to identify success and lessons learned better and to communicate them to USAID/W so that, among other things, we can make

more effective arguments for development assistance in the U.S. Congress.

5. We need to engage both the potential losers and winners in analyses of and dialogue on how to promote an agricultural transformation, especially through policy, regulatory, and institutional change.

6. We need to look more carefully at what contribution roots and tubers can make to the agricultural transformation.

Innovations

1. ADOs should be involved in policy dialogue.

2. Use more rapid appraisal techniques in collecting data with more in-depth studies of sample households.

3. Analyze land tenure systems as one potential constraint and/or opportunity to affect the agricultural transformation.

Difficulties

1. The "private sector" and the "public sector" are broad terms that cut across the traditional sectors of the economy within which USAID works: agriculture, health, education, and family planning. *Therefore, USAID should discourage the use of "Private Sector" in its reporting because it is so misleading unless applied to a sector of the economy.* For example, the charts seen earlier today imply that 50 percent of our Missions are *not* active in the agricultural sector, which seems preposterous given the agricultural base of African economies.

2. The skills and capabilities of the ADOs are not widely known or appreciated.

3. There is little coordination of information by USAID/W and the field and not enough well-packaged and timely flow of information from USAID/W to the field.

Session 4: LESSONS LEARNED FROM MISSION AGRICULTURAL MARKETING POLICY REFORM PROJECTS AND PROGRAMS

Purpose of the Session:

To provide ADOs with an opportunity to exchange information by presenting success stories and lessons learned from recent or on-going agricultural marketing policy reform programs and projects.

Moderator: Larry Harms, ADO Mali

Break-out Group Discussion Leaders:

Uganda — Tom Herlehy, AFR/ARTS/FARA
Mali — Gaoussou Troare, FSN ADO, USAID/Mali
Malawi — Joanne Hale, ADO, USAID/Malawi
Cameroon — Ernest F. Gibson, AMA Unit Leader, AFR/ARTS/FARA

Guest Comment:

Felix Masanzu, Government of Zimbabwe, Chief Economist for the Agricultural Marketing Authority

Tom Herlehy: "Uganda"

The programs of several countries that are trying to promote nontraditional agricultural exports were analyzed, including *Uganda, Burundi, and Madagascar*.

1. *Processing a commodity can change it from a traditional export to a nontraditional export,* such as high-value, gourmet-processed coffee exports being developed by Burundi.

2. *Supporting nontraditional exports, especially through more processing of traditional commodities, will require more investment*. But most of East Africa lacks entrepreneurs and investors, except for the Asian/Hindu or European (British and French) community. Encouraging foreign, especially Asian, investment may have political ramifications that need to be considered in program design.

3. Beyond policy reform, *rehabilitation of marketing infrastructure and diffusion of new technology are needed* so that the reforms have the desired effect on private agribusiness.

4. Nontraditional exports may not have a broad-based impact on all producers and marketing agents unless program design also considers innovative ways to exploit traditional exports, such as by increasing local processing or introducing more productive technology.

5. Programs should provide not just *opportunities* for private agribusiness firms, but also *the means* (technical assistance, training, institutional support) to take advantage of those opportunities. (For example, Uganda has the Agricultural Nontraditional Export Promotion Program (ANEP) and Export Policy Analysis and Development Unit (EPADU), Burundi has a policy reform unit, Madagascar has a policy advisory committee, and Rwanda is developing the capacity in its Ministry.)

6. Measure impact by collecting macroeconomic statistics (Uganda: export data from Customs) and sectoral data (Madagascar: percentage of free-on-board price paid to farmers); household survey data (Rwanda and Burundi: household surveys on expenditures and sources of income); and surveys of private firms involved

in marketing through both formal surveys (Uganda) and informal interviews (Uganda and Burundi) can also yield important information.

7. *Data collection needs of the Mission, the other donors, and the host country need to be well conceived and coordinated to avoid duplication* and unsustainable data collection efforts by the host country institution.

Gaoussou Traore: "Mali"

The USAID/Mali Development of the Haute Vallée (DHV) Project was analyzed. One of the objectives of the DHV Project is to privatize the marketing and transportation of agricultural inputs and outputs by promoting village cooperatives or associations.

1. Since the 1989–90 season, 100 percent of the cotton and tobacco grown in the project zone has been transported by private firms, resulting in a reduction of 51 percent in transport costs.

   LESSON LEARNED: Private marketing firms are more efficient than public-sector entities.

2. More villages (52 in 1991) are now contracting directly with private agribusiness firms for their inputs and equipment (e.g., fertilizer, pesticides, plows and seeders). In addition, 30 blacksmiths have been trained to build finished farm equipment from locally available scrap metal.

   LESSON LEARNED: Privatization of input marketing contributes to the success of privatization of output marketing activities.

3. To provide greater access to all villages in the DHV zone, the project has helped fund the construction of 398 kilometers of roads, which are now being maintained by the villages.

   LESSON LEARNED: Marketing infrastructure, especially roads, is critical to the success of the marketing activities, including effective privatization.

4. A total of 1,800 managers and 5,400 members have been trained in business management techniques, functional literacy, and numeracy skills. This has contributed to the successful operation of many of the 170 cooperatives and village associations in the program.

   LESSON LEARNED: Developing indigenous capacity to operate, manage and self-finance development institutions contributes to their sustainability.

Joanne Hale: "Malawi"

The USAID Agricultural Sector Assistance Program (ASAP) was analyzed.

1. *Stress the importance of involving all "stakeholders" in reform program dialogue and program management:* small-holder farmers, agribusiness owners, and government officials.

2. USAID can facilitate such discussions but should ensure that host country participants have a sense of ownership of the reform program and are involved in its implementation.

3. Studies leading to the design of policy reform programs should *involve, to the greatest extent possible, host country institutions and people* who will be affected by the reforms.

4. *Donor coordination* also plays an important role in the success of any policy reform program.

5. Collecting data and information to monitor the impact of policy reform programs should be as de-centralized as possible, especially for collecting household data.

6. *Disseminating information t*o USAID/W and other donors on the success of the program is important *so that lessons may be learned and applied elsewhere.*

Ernie Gibson: "Cameroon"

The USAID Fertilizer Sub-Sector Reform Program (FSSRP) and the USAID Policy Reform in the Agricultural Marketing Sector (PRAMS) program were analyzed.

1. Fertilizer importation and domestic marketing was privatized successfully in Cameroon, at market-determined prices.

   LESSON LEARNED: Good analysis of the issues related to the supply of and marketing for fertilizer laid the foundation for success.

2. The Cameroon Government's inability to subsidize continually fertilizer marketing ensured the agreement of officials to marketing reform.

   LESSON LEARNED: When governments are in dire financial or economic situations is the best time for donors to push for economic reforms.

3. Marketing reform successfully lowered real fertilizer prices to farmers by more than 40 percent despite the end of a government subsidy of 70 percent because the private sector was more efficient in marketing than the public sector.

   LESSON LEARNED: The private sector is more efficient in marketing activities than the public sector.

4. The fertilizer marketing reform program was a success because of regular annual review meetings among the Mission, the private agribusinesses involved in the program, and Cameroon government officials involved in administering the reform program.

   LESSON LEARNED: Effective communication among program participants during implementation of reforms is critical to the ultimate success of the liberalization activity.

5. Insufficient analysis was devoted to demand issues, especially the existing and anticipated demand for fertilizer by coffee farmers (the major users of fertilizer). Indeed, liberalization of input marketing (fertilizer) was not complemented by liberalization of output marketing (coffee). As a result, fertilizer consumption (and sales) slumped until farmers began applying fertilizer to profitable vegetable crops.

   LESSON LEARNED: To be successful, market reform programs should focus on the entire commodity system, including both input and output marketing.

6. Concurrent financial sector reform at the commercial banks ensured that short-term commercial credit was available for private-sector imports of fertilizer, which contributed to the program's success. However, medium-term credit was not made available until near the end of the program for the construction of warehouses or fertilizer mixing and blending and bagging facilities.

   LESSON LEARNED: Adequate access to financial services is critical to the ultimate success of market liberalization programs.

7. Policy reform is continuing in Cameroon because the Government is in the midst of democratization. Elections are being held; the government is stable; and educated people, many with ties to private business, are taking positions in the ministries.

   LESSON LEARNED: Private agribusiness development and democratization are complementary and mutually reinforcing.

8. Seed marketing has also been privatized successfully in Cameroon with the Pioneer Hi-Bred Seed Company leasing a seed produc-

tion and processing facility, and investing $2 million in producing and marketing peanut, corn, sorghum, and cowpea seed.

LESSON LEARNED: USAID Missions and host governments must come up with innovative methods to provide incentives to the private sector before they will risk their capital in Africa.

Felix Masanzu: "Zimbabwe"

Zimbabwe's structural adjustment program began in 1991, after other countries in the region had started such programs. This has involved restructuring the composition of the board of directors of the state marketing boards to involve more private businesspeople and delegate more authority to the boards of directors to make decisions, such as about pricing policies, instead of Government ministries.

There is a drought in Zimbabwe and the next rains are not due until November 1992.

In addition to the problem of feeding farmers this year, there is the problem of *where poor farmers, who have not produced any marketable surplus this year, will earn the income necessary to buy the inputs required to farm next season.*

Some livestock herds are still intact, but cattle are used for animal traction and food. They cannot be easily sold by farmers.

Despite the problems inherent in coping with the drought, the Government is committed to maintaining the reform and structural adjustment program. The Government hopes to secure donor support to ensure that for the next planting season, farmers get the seeds, technologies, cattle, and extension services needed for agricultural recovery.

Recommendations

1. National and regional data collection on agricultural production, current and future trends, is critical to the success of marketing programs.

2. Data analyses must be done nationally but shared regionally.

3. Agribusiness processing capacity must be increased to increase the demand for what farmers produce.

4. Adequate storage and calculations regarding how much production to store have to be improved.

Other Success Stories

Curt Reintsma: "Lesotho"

Under the USAID Agricultural Policy Support Program (APSP), the Government of Lesotho eliminated the monopoly that an SOE (state-operated enterprise) held over agricultural input marketing, and private traders are now selling agricultural inputs. Fertilizer subsidies have also been eliminated, further encouraging privatization of competitive input marketing.

Session 5: Agribusiness Projects and Programs: Lessons Learned and Innovative Approaches

Purpose of the Session:
To respond to Mission ADO requests for information about what other Missions are doing to resolve problems and create opportunities for agribusiness entrepreneurs.

Moderator: Eugene Grasberg, ADO, Madagascar
Presentations: Rich Newburg, ADO, Burundi: "New Approaches"
Martha Blaxall and Lawrence Kent, DAI for Chad: "New Approaches"
John Holtzman, Abt Associates: "Preliminary Results of the AFR/ARTS/FARA Agribusiness Analysis"

Rich Newburg: "Burundi"

USAID/Burundi is supporting agribusiness development *to diversify agricultural exports and add value to exports.* For example, we are trying to help develop a gourmet-processed coffee export to add value to coffee currently being exported.

We are finding, however, that Burundi, like other countries in the region, has *relatively few well-funded entrepreneurs with the managerial skills and the technical knowledge* to take advantage of policy reforms and business opportunities. Most Burundi entrepreneurs and investors are found in the European (French) community.

Nontraditional exports may not have a broad-based impact on all producers and marketing agents unless program design also considers innovative ways to exploit traditional exports, such as by more local processing or introducing more productive technology. It is important to collect data that can help us ensure that our programs are having a broad impact.

Therefore, in Burundi we are conducting household surveys on expenditures and sources of income and doing informal and formal surveys of private firms involved in export marketing.

Finally, agribusiness promotion programs should provide not just *opportunities* for private agribusiness firms, but also *the means by which firms can take advantage of business opportunities.* This means institutional reform. In Burundi, we are supporting the policy reform unit, which will assist entrepreneurs and also work with us on data collection surveys.

Martha Blaxall and Lawrence Kent: "Chad"

The Agricultural Marketing and Technology Transfer (AMTT) Project is being implemented by Development Associates Inc. (DAI) in Chad.

The project provides:

- technical assistance for policy analysis to support policy and regulatory change;
- development of a market information system; and
- creation of an agribusiness support center.

The importance of international telephone and telefax communication links, especially for high value horticultural exports from Sub-Saharan Africa to Europe, cannot be under-estimated.

There are publications, such as *COLEscp*, funded by the European Economic Community (EEC), which are published monthly with prices for commodities. These are helpful to potential exporters and which will be available through the Agribusiness Support Center in Chad.

AGROscan is another example of an agricultural marketing publication that contains useful marketing summaries. It is available through DAI.

The project has been slow in starting because of the continual unrest and the most recent successful rebellion (1991), but we are now beginning implementation and should have more results to report in another year.

John Holtzman: "Results of an Agribusiness Assessment"

Policy reform is essential to the success of agribusiness development, but institutional strengthening is also needed, especially:

- *Public-sector institutions to help the private sector* with technical assistance and training;
- Better *financial services and other supporting services* (management and accounting) for agribusinesses;
- *Monitoring policy and regulatory reform* impact so that continual adjustments can be made; and
- *Market information systems* with the public sector facilitating the collection, analysis, and dissemination of data.

Indeed, a review of successful USAID agricultural marketing programs and projects in Africa reveals that:

- Donor coordination is essential to successful implementation of marketing reform programs for staple crops (e.g., cereals) or key export crops (e.g., coffee, cocoa).
- Policy reform projects are more successful if complemented by public-sector investments in marketing infrastructure, especially roads and market information services.
- Policy reform programs are more successful when complemented by the delivery of services (e.g., technical, financial, managerial) to private agribusinesses so that they are more capable of taking advantage of the new opportunities.
- Public-sector institutions designed to support market development, especially exports, must have adequate incentives to do so, in terms of salary and promotions, and may need continual support to improve and strengthen their capacity to deliver the services most needed by private agribusinesses.

Other Success Stories

Dennis Panther, ADO, USAID/Togo

The *Togo Rural Institutions and Private Sector Support (TRIPSS) Project:* with USAID funds, CARE is working to bring together local and international agribusiness with other private-sector institutions and the Caisse Centrale Bank. These organizations help make presentations of "bankable" projects to the Caisse Centrale to secure financing for Togolese agribusinesses. CARE is also providing follow-up management, technical assistance, and training to these firms.

David Martella, ADO, USAID/REDSO-ESA

The USAID *Uganda Cooperative Agriculture and Agribusiness Support (CAAS) Project:* increased export of white sesame and broad beans to the Middle East through the project and the monetization of the PL 480 commodities; increased sunflower oil production at the cooperatives; and increased private exports of robusta coffee through assistance to the Union Export Services and other licensed private agribusinesses.

July 14, 1992 (Tuesday)

Morning Theme:

Results of Research and Analysis of Agricultural Marketing and Agribusiness Projects and Programs

Session 1: NEW APPROACHES TO FINANCIAL SERVICES FOR AGRICULTURAL MARKETING AND AGRIBUSINESS DEVELOPMENT

Purpose of the session:

To respond to Mission ADO requests for more information about new approaches to financial market development.

Moderator: Jerry Wolgin, Director, AFR/ARTS

Presentations: Professor Richard Meyer, OSU: "Financial Markets and Agribusiness Development"

Gaoussou Traore, USAID/Mali: "A Case Study of Community-Based Financial Organizations"

Faustin Kabwe, Executive Vice-President, Meridien International Bank Ltd., New York: "A Commercial Banker's Perspective"

Nancy Barry, President, Women's World Banking, New York: "Financial Intermediation: The Missing Middle"

Dick Meyer: "Financial Markets and Agribusiness Development"

Policy reform and structural adjustment programs are beginning to create a more favorable environment for private enterprise and agribusiness development.

Nevertheless, policy reform and market liberalization are not sufficient to generate agricultural marketing growth or agribusiness development. *Agribusinesses need more diverse sources of and better access to financial services to perform their marketing functions effectively*. A restructured, recapitalized financial system will be needed in most sub-Saharan countries.

Programs designed to support agricultural production and marketing activities through targeted financial services have not succeeded in reducing risk for rural households or marketing agents.

Credit programs that target subsidized loans to particular borrowers for specific end uses *have generally failed because:*

- they weaken the financial base of the implementing institution;
- nontargeted borrowers often obtain a large portion of the funds and implicit subsidies; and
- borrowers use fungible financial resources for whatever purpose produces the greatest expected return.

Targeted credit programs usually impose high transaction costs on the borrowers because the excess demand for loans ends up being rationed through nonprice mechanisms.

In addition, the ineffective supervision, regulation, and management of these financial institu-

tions contribute to their poor performance and frequent failure.

As a result, compared to other geographical regions, a smaller portion of African households and agribusinesses have access to formal financial services, long-term savings and loan contracts are almost nonexistent, there is more financial dualism, and less linkage exists between the informal and formal sectors.

Several institutional forms are being promoted to deliver financial services, but none has yet emerged to resolve these problems successfully.

Development banks have generally failed to provide medium- and long-term credit on a sustainable basis.

Commercial banks are reluctant to provide financial services to rural areas, especially for agricultural purposes.

Multipurpose *agricultural cooperatives* generally have failed when controlled and supported by government rather than by the members they are designed to serve.

Credit unions have a comparatively better performance record when they are built on self-help principles.

Special institutions for the poor are being promoted currently by several nongovernmental organizations (NGOs) and private voluntary organizations (PVOs) but they have yet to prove their long-term viability.

Group formation and lending with group guarantees are a frequent feature of many programs in a recent attempt to resolve the property rights and collateral issues associated with contract enforcement problems, but they have not been shown to reduce lending costs and risks.

The development of viable financial institutions to meet the financial needs of agribusinesses requires *greater emphasis on savings mobilization and loan recovery* than has been found to date in most government and donor programs, which, instead, emphasize the number of borrowers and loans disbursed.

More research needs to be done to discover short- and medium-term solutions to these problems.

Over the short term, we must try to improve our understanding of how the financial sector can contribute immediately to resolving the production and marketing problems faced by rural households and agribusinesses. This involves *analyzing how the links between agribusiness and formal-sector financial institutions can be strengthened* so that more financial services can reach rural marketing agents who have business relationships with medium and large agribusinesses.

For the long term, we need information on how to develop *strong, viable financial markets* that will promote the long-term growth of agricultural marketing activities and agribusinesses. This involves analyzing methods to develop medium- and long-term savings and lending programs and services that will be manageable and sustainable.

Gaoussou Traore: "A Case Study of Community-Based Financial Organizations: Mali"

The USAID/Mali Development of the Haute Vallée (DHV) Project has an agricultural marketing privatization component, which we discussed yesterday. In addition, the DHV Project has a financial services component, which I will discuss today as an example of a successful grass-roots approach to savings mobilization and financial services for cooperative members.

In the DHV Project region, rural credit supply to farmers has been successfully privatized with *five commercial banks now making about 82 percent of all loans to village associations* in the project zone for the purchase of agricultural inputs.

To date about 2.192 billion CFA francs (about $79.6 million) has been lent out, with a repayment rate of 95.7 percent (see Figure, p. 25). *Women's groups are getting about 18 percent of these loans.*

USAID support for this program was provided in the form of loan guarantees for the first three loans to any village association. Once the cooperatives established their credit histories with

Year	Amount loaned (CFA francs)	Repayment rate	Percent of loans from commercial banks
1984/85	132,418,000	92.0%	21.0%
1985/86	209,900,000	94.3%	41.0%
1986/87	259,405,000	96.0%	54.0%
1987/88	311,676,000	97.2%	49.0%
1988/89	449,732,000	96.6%	60.0%
1989/90	399,854,000	98.0%	68.0%
1990/91	429,763,000	96.0%	76.0%
1991/92	(not available)	(not available)	82.0%
Totals	2,192,748,000	95.7% (avg.)	56.4% (avg.)

the banks and, assuming that repayment rates continue to be favorable, the commercial banks no longer required the guarantees, the USAID-funded guarantee program is gradually withdrawn.

Much of the success of this credit program can be attributed largely to two associated project components:

- Functional literacy training for the managers of the village cooperatives; and
- Management training provided by the National Cooperative Business Association (NCBA) of Washington, D.C.,[1] and the U.S. Peace Corps.

Faustin Kabwe: "A Commercial Banker's Perspective"

I am not here to speak as an expert on the subject of agricultural marketing and agribusiness but as someone who is engaged in *the development and expansion of banking and financial services in sub-Saharan Africa. The Meridien Bank is active in 22 African countries.*

My direct business experience has been limited to Zambia, my home country, where I have been involved with aspects of agricultural financing as a corporate executive and as a farmer in my own right.

I am conscious of the dangers of simplification when dealing with such a complex subject as agriculture in Africa, where each individual country's agricultural potential and financial needs vary so much.

I want to focus on the role that donors can play in supporting agricultural trade and agribusiness through the medium of financial institutions.

I appeal to the donors to put more confidence in the private sector institutions and to channel more resources to private agribusiness for the effective promotion of African market development.

African commercial and other private financial institutions can perform a critical role in channeling resources to agribusiness. Unfortunately, the financial structures of many African countries have become too weak to do so because of excessive government borrowing, unsound subsidy policies, and budgetary deficits.

Financial services are a partnership between the private commercial banks and the development banks: there will continue to be a need for development bank financing of agricultural marketing and agribusiness development activities.

I am calling for a new partnership between private enterprise and development finance to

1. Formerly known as the Cooperative League of the United States of America or CLUSA.

advance a new level of financial intermediation that is in tune with the realities and changing business conditions in Africa. This involves having the donor community put more trust in private financial intermediaries in support of agricultural marketing and agribusiness development.

The barriers to effective cooperation between private financial institutions and development agencies include burdensome procedures for assessing capital flow from donor agencies and donor mistrust of private financial institutions.

These genuine concerns can be addressed through audits and other checks and balances incorporated into an evaluation and monitoring process. No credible financial institution in Africa will risk its reputation by not fulfilling its obligations in any relationship with the international donor community, especially at a time when private-sector institutions are being encouraged to take the leadership role in development.

There are several ways private commercial banks and the donors can cooperate in agribusiness development:

1. *Private banks can help development agencies in financing the privatization of state marketing boards*. But, in order to help finance successful privatization of agribusinesses and other private agricultural marketing activities, the financial sector needs to be strengthened.

2. Therefore, *donor funds should be used to improve the liquidity of local financial institutions*, which would increase their ability to support commercial agricultural activities.

3. The commercial banks and donors should cooperate to support the international prices of Africa's competitive exports.

4. The donors and commercial banks should work together to encourage establishment of agroprocessing industries in (rural) farming areas, which would add value to marketed output.

5. Donors and commercial banks should cooperate to help peasants organize themselves into commercially viable marketing organizations, which would help them get the financial support they need to increase productivity and marketing.

I am optimistic that we can support new strategies to channel financial support to agricultural marketing activities. I base this optimism on the changing mood of African governments toward real macroeconomic reform and the shift in the attitudes of African people towards a stronger spirit of self-reliance.

Nancy Barry: "Financial Intermediation: The Missing Middle"

I want to begin my talk today with a few premises:

1. Structural adjustment programs alone cannot generate economic growth in the developing world. Policy changes are necessary but are not sufficient for growth.

2. Government services in most countries do not work; government credit services, government marketing and extension services, input supply services, and agroprocessing are inefficient and ineffective.

3. Financial intermediation is the "missing middle" in the development equation.

4. Development does not mean just more credit. Development means a broad array of fully integrated financial services for private enterprises.

5. *Targeting is not a dirty word.* The question is how to do it, and most commercial and development banks generally cannot do it.

6. Donors must pick sound, well-managed financial intermediaries and work closely with

Credit is a lubricant but not a substitute for competitive enterprises and competitive systems; only through effective competition do agribusinesses become more efficient. Credit can actually saturate markets and agribusiness. Credit, like all resources, should be allocated effectively and efficiently.

them to offer a variety of financial services to client groups, whether these intermediaries be savings and loan associations, cooperatives, or nongovernmental organizations (NGOs).

Using successful agribusinesses to reach the smaller enterprises in rural areas may be one way to reach more clients through formal and informal financial networks. Agribusinesses could serve as financial intermediaries between formal sector financial institutions with whom they deal and the informal sector's small- and medium-sized enterprises by helping to finance production and marketing activities in rural areas.

The criteria for choosing a financial intermediary with which to work are important for donors and for financial institutions like Women's World Banking.

The intermediaries with which we work in Africa should be:

- Financially sound, charging fees that cover the costs of doing business;
- Charging customers market interest rates for loans and paying market interest rates for deposits;
- Delivering services efficiently and effectively;
- Collecting at least 95 percent of its loans;
- Reaching the chosen client base (a form of targeting);
- Avoiding fads; and
- Tough in management and opportunistic in outlook.

This means that we should:

- Avoid supporting most development banks;
- Avoid trying to restructure a bank or group of banks;
- Pick the best financial intermediaries (in terms of management and portfolio); and
- Recognize the legal limitations under which most commercial banks operate.

We must understand why most commercial banks, operating alone, will not respond to "market forces" or small borrowers in order to understand why working with other financial intermediaries is so important.

Commercial banks are reluctant to work with small borrowers or clients with few visible assets for the following reasons:

- The perceived risks of working with small- and medium-sized business or business in the agricultural sector;
- The hassle of dealing with many small operators and managers as clientele;
- The costs of doing business with many small- or medium-sized enterprises and clients instead of a few large firms;
- The problems of dealing with traditional judicial systems, their enforcement, and the pledging and collection of traditional collateral in a modern banking system and modern legal environment; and
- The age-old problems of differences in culture, customs, and levels of comfort generated by the mutual familiarity or lack of it between a banker and his or her customers.

Because of these real and perceived risks, donors and international financial institutions that are promoting development need to take more initiative to devise active strategies, which will back sound yet innovative financial intermediary institutions.

This means that donors should be looking to work with commercial savings banks, cooperative banks, NGOs, rural banks that are serving primarily rural clientele, savings and loans associations, and even, where possible, informal sector financial intermediaries and catalytic

Agribusinesses, to be good bank customers, need to take a financially sound approach in their operations, have a program, have their own clients, and know the impact of their operations. Agribusinesses need to develop a track record of sound operations and practices for commercial banks to have confidence in them as clients.

agribusiness firms that are part of wider enterprise networks.

One method of supporting such intermediaries is to provide capital funds, which will generate an earnings stream. This will give the donor some leverage in dealing with the financial intermediary, and it will give the financial intermediary some flexibility because it will be able to fund its core operations as it expands and builds its client base to complete self-sufficient operating capacity.

This whole process should take between five and seven years. Donors need to recognize that this is a lengthy process and need to be able to stay with it until the end.

The donors can also help commercial banks develop the capability of supporting such financial intermediaries by training and technical assistance, which will help them develop the internal capacity to assist their clients to develop sound agribusiness plans and projects.

Another key role for *the donors is to promote balance between the external financial systems and domestic financial system by supporting domestic resource mobilization.*

Technical assistance over the short term will be necessary, but it should come *from real practitioners in financial institutions* and not from armchair financial experts.

Moreover, there is still no substitute for being a practitioner, for doing things, and for learning from what you have done, so *African bankers should be encouraged to get out of training and on the job as soon as possible.*

Regarding *financial services to small and microenterprises (SMEs)* in Africa, we have learned the following from our experiences.

SMEs are a promising subsector of the economy that few commercial banks are serving financially. Most financing for SMEs comes through the NGOs.

To work with SMEs, it may be necessary to provide *credit lines with two-tier guarantees:* one guaranteed by the borrower and one guaranteed by the donor until the creditworthiness of the SME is proven and the financial institution builds up the experience and implements the systems and policies required to provide financial services to such agribusinesses.

Such a system of loan guarantees would also help to overcome some of the problems we identified earlier, including especially the commercial bankers' perceptions of SMEs' risks, the hassles they believe they will encounter, the cultural gaps they believe exist, and the cost of intermediation.

The donors can also help domestic commercial financial institutions by funding and providing:

One problem that commercial banks have in dealing with SMEs is that they are very dispersed geographically, which tends to drive up the costs of providing services over the area. Thus, commercial banks should try to use enterprise networks and package financial services together to reduce individual transaction costs. This may involve *targeting and bundle financial services to enterprises that operate in specific commodity systems* (i.e., especially for marketable products that are generating income and cash flow, such as fish, dairy products, fruits and vegetables, edible oils, health foods, flowers and plants, natural cosmetics) or *using existing organizations and networks as financial intermediaries to deliver financial services* (such as through associations of SMEs and agribusinesses, local informal trading networks, associations of producers, cooperatives, NGOs, limited consortiums, community groups.

- *Credit-related training,* especially for handling many smaller clients and loans so that these kinds of services can be introduced gradually at domestic financial institutions;
- Assistance with the design of various kinds of *financial services to reach the client group,* services that embody the concept of "sustainable financial intermediation" with rewards for competency; and
- Assistance to help the financial institution *identify and work with existing SME networks* in the formal and informal sectors so that their mutual marketing links are strengthened.

Enterprise networks should be nurtured and promoted as one method to ensure that marketing systems work efficiently and agribusinesses operate efficiently.

Financial support projects need to take an entirely new approach. Financial institutions need to be more aggressive and take more initiative in searching out clients and in designing financial services to meet their needs.

Donors should design projects that support institutions that serve as catalysts in terms of generating economic growth through provision of sound and diverse financial services.

Governments, including donors, should provide funds through banks, but they should let the banks manage the funds and not get involved in the business of providing services directly to the bank's clients or potential clients.

This brings me to some key questions that need to be asked before designing and implementing a financial services for agribusiness program or project:

1. Which enterprise networks will the services target, local-market or export-market agribusinesses?

2. What are the most promising financial products and services for those enterprise marketing networks?

3. How can progressive financial service organizations link up with those organizations and identify the catalyst firms that will benefit from the services and serve as models for other firms?

4. With which other financial intermediaries, in the formal and informal sector, can the financial institution work to identify and reach its prospective clients?

Finally, *what should be the role of the banks in promoting private sector development?*

Banks should be banks.

Central banks should fulfill their role as regulators of the entire financial system and not get involved in commercial banking services, such as providing direct credit to firms or enterprises.

Commercial banks should continue to fund the larger, commercially successful and profitable agribusiness firms that are their main clients.

Banks should be banks.

However, there are *niche markets for other financial intermediaries*—the smaller commercial banks, NGOs, rural banks, cooperative unions, and smaller financial institutions—to deliver financial services. These smaller financial institutions can serve as intermediaries between the larger commercial banks and the rural clients who currently lack access to formal sector financial services.

By identifying well-managed and profitable microenterprises and small enterprises, intermediate financial institutions can serve as catalysts in helping such firms graduate to medium-sized status and even move from the informal to the formal sector, thereby generating more employment and more business for their customers.

The lessons learned from such an experience can be applied by financial intermediaries to other firms in that commodity system or network of enterprises, and other small firms can grow and generate the profits needed for additional investments, which will promote broad-based economic growth.

Jerry Wolgin: "Summary of Session 1"

Based on the discussion generated by this session, we have captured the following information on what some of USAID's *successes* have been, what *improvements* we have made or still need to make, what *innovations* should be explored, and what *recommendations* we have for overcoming the difficulties we face.

Successes

1. *USAID/Cameroon* has successfully strengthened the capacity of credit unions to deliver financial services to clients, especially in rural areas and among agribusinesses.

2. *USAID/Niger* has successfully promoted credit union development and the delivery of financial services to its rural clientele, many of which are SMEs.

3. *USAID/Togo* has worked successfully with credit unions, too, strengthening their management and accounting systems and financial services delivery.

Improvements

1. We need to be able to help organizations make good loans or investments.

2. We should take the time to obtain adequate information before acting.

Innovations

1. We should be prepared to support smaller, newer institutions that meet entrepreneurial criteria.

Recommendations

1. Don't succumb to the temptation to do all those things which we are being pushed to do when we know that the conditions are not yet appropriate for action.

2. Be more sophisticated in securing more favorable terms for money lent.

3. Teach financial management skills to more credit union staff.

Session 2: RESULTS OF RESEARCH ON REGIONAL TRADE OPPORTUNITIES

Purpose of the session:
To discuss regional trade opportunities for increasing agricultural exports in Africa.

Moderator: Dwight A. Smith, AFR/ARTS/FARA FSP Unit Leader
Presentation: Mike Woolsey (USDA/FAS), "Africa and the World Trade Outlook"

Mike Woolsey: "Africa and the World Trade Outlook"

The most important trend in world markets for agricultural commodities is the continuing rise in the demand for consumer-oriented commodities. Between 1983 and 1990, growth in consumer-oriented, high-value agricultural commodities has been more rapid than growth in the demand for bulk agricultural commodities or intermediate agricultural products.

Indeed, *in 1990 consumer-oriented, high-value agricultural commodities comprised fully 43 percent of all international agricultural trade*, with bulk commodities accounting for about 34 percent and intermediate goods being about 23 percent of all world trade in agricultural products.

Fruits and vegetables are in the highest demand in world markets among all the consumer-oriented, high-value agricultural commodities, and the growing international demand for fruits and vegetables is leading the surge in global consumer-oriented trade (see Table, p. 32).

Currently, *the European Economic Community (EEC) and the United States dominate this consumer-oriented trade*, being both the largest exporters and the largest importers of consumer-oriented, high-value agricultural commodities.

Japan is also emerging as an important market, with imports of almost $15 billion consumer-oriented high value agricultural commodities in 1990 (see Figure, p. 33, which represents the growth in dollar volume of processed and raw horticultural imports).

The 19 leading exporters of consumer-oriented, high-value agricultural commodities (by dollar value for 1990) are: the EEC (over $20 billion), United States (more than $10 billion), Australia and New Zealand (both at about $5 billion), Brazil and Thailand (both about $4 billion), China (about $3.5 billion), Canada (about $3 billion), Turkey (about $2 billion), and Malaysia (about $1.5 billion).

Agricultural exports from sub-Saharan Africa, however, are still dominated by bulk commodities, which have the lowest value on international markets and are the commodities for which international demand is growing the slowest.

- Fully 70 percent of all agricultural commodities exported from sub-Saharan Africa are bulk commodities.
- About 15 percent of Africa's agricultural exports are intermediate commodities.
- About 15 percent of Africa's agricultural exports are consumer-oriented, high-value products.

There has been little change in these shares of the market between 1983 and 1990. Indeed, in terms of *the share of value* of total horticultural exports, Africa has lost its share of the rapidly rising world trade in these commodities since the period following independence.

- In the decade 1961–70, Africa had a 12.6 percent share of total world exports of horticultural commodities.
- By the 1971–80 decade, however, Africa's share had declined to 7.4 percent of the international trade.
- During the most recent decade, 1981–90, Africa held only 4.1 percent of total world exports of horticultural commodities.

Other areas of the world—notably Asia, Latin America, and Europe—have increased their shares of world horticultural trade during the same period.

Despite this bleak picture, *some positive regional as well as commodity-specific trends are emerging* that may presage a rise in consumer-oriented, high-value agricultural commodity exports from sub-Saharan Africa.

Consumer-oriented, high-value agricultural exports from *East Africa* grew in value from about $330 million in 1983 to $356 million in 1990 but still remained at 10 percent of all agricultural exports. However, some commodities are growing, while others are experiencing some difficulty.

For example, there is strong, positive growth in both *fresh fruits and fruit products* (up 47 percent to about $100 million in 1990) and *fresh vegetables and vegetable products* (up 53 percent to about $80 million in 1990). A decline in spice exports (down 13 percent to about $100 million in 1990) and "other" high-value commodities have offset the impressive gains in fruit and vegetable exports, however.

In *West Africa*, consumer-oriented, high-value agricultural exports have grown in value from about $300 million in 1983 to $613 million in 1990, and in market share from 10 percent (1983) to 19.5 percent (1990) of all agricultural exports. Growth rates would have been even higher if not for the 25 percent decline in cocoa products exports (from $280 to $210 million) and a 23 percent drop in pineapple exports (from $75 to $58 million).

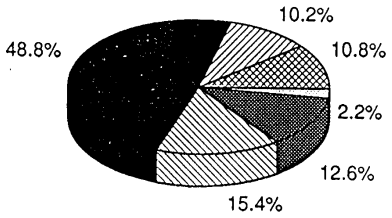
Robust growth in *coffee extracts* (53 percent, from $55 to $84 million), *nuts* (40 percent, to $42 million), *bananas* (20 percent, to $40 million), and "other" consumer-oriented agricultural commodities (up 304 percent, to $90 million) indicate that African agribusiness firms are seeking and finding new international markets for their high-value agricultural exports.

Similar trends characterize *Central Africa*, where, in 1990, total consumer-oriented agricultural exports reached $100 million, about 13 percent of total agricultural exports. A dramatic increase in *banana* exports (up 1,440 percent, to more than $25 million in 1990), *beer* (up 13 percent, to about $9 million), and "other" high-value agricultural commodities (up 400 percent, to $39 million) are leading the growth in this region's consumer-oriented exports.

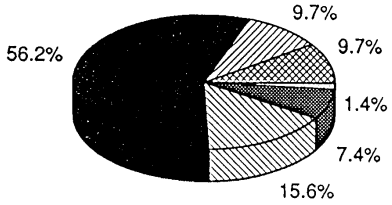
Consumer-oriented agricultural exports are at their highest value in *Southern Africa*, with $154 million exported in 1990, fully 30 percent of all agricultural exports from the region. *Beef and veal* (up 49 percent, to $108 million), *canned pineapples* (up 27 percent, to $19 million), and *citrus fruits* (up 13 percent, to $18 million) are the leading high-value agricultural exports from the region.

Commodity	1986 (million U.S.$)	1990 (million U.S.$)	Projected annual growth Growth rate	through 1998
Fruits & Vegs (Fresh & Process)	$15.5	$21.6	+39.4%	+5.4%
Beef & Veal	$13.1	$14.1	+ 7.8%	+3.5%
Dairy products	$ 5.6	$ 8.0	+42.8%	+5.8%
Pork	$ 3.6	$ 4.7	+30.5%	+5.2%
Wine & Beer	$ 3.9	$ 5.5	+41.0%	+5.7%
Other Consumer-Oriented Products	$10.5	$23.8	+127.0%	+7.7%
Total	$52.2	$77.7	+48.0% (average)	+5.5% (average)

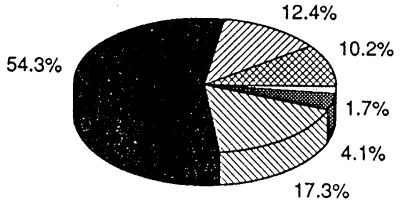
Total Horticultural Exports: Share of Value



1961-70



1971-80



1981-90

North America | Latin America | Europe | Asia | Africa | Other

Break-Out Group Discussions

1. West Africa Regional Trade

Henri Josserand, Club du Sahel/Organization for Economic Cooperation and Development
John Holtzman, Abt Associates

Henri Josserand: "Regional Trade Opportunities"

Regional trade in West Africa is carried out primarily by private traders. But private marketing activities take place within a policy and legal environment that is defined by *relations between the state and civil society.*

Regional integration or cooperation means different things to different constituencies or interest groups. To *the World Bank*, for instance, it may evoke liberalized markets allowing the free trade of goods and services based on the principle of comparative advantage. For *the French*, however, regional integration is a means of rallying several countries together, under the banner of the CFA franc, to constitute a bloc opposing Nigeria's growing regional economic influence.

Since 1987, the Club du Sahel, with the support of various donors (France, in particular), has sponsored research on regional trade in West Africa. The main findings are:

- First, a lot more trade is happening than the official statistics indicate.
- Second, the determinants of trade flows are numerous, complex, and not always in accordance with natural complementarities in the region, nor are they systematically contributing to economic growth in the region.

For example, a lot of trade is motivated by the *profits that can be made because of different national pricing policies for commodities and currencies.* Higher cross-border prices for commodities, such as peanuts or rice, is often the only reason these commodities are traded between countries.

> Niger has consistently had a livestock surplus and has exported to Nigeria. Yet, as the relative prices change with the growing overvaluation of the CFA franc, especially against the devalued Naira, livestock sales from Niger to Nigeria have virtually halted and, in a few instances, they have even reversed!

In addition, in some countries, *imported-oriented policies have maintained a bias against the agricultural sector*, except for a few heavily subsidized production areas.

For example, even when promoting local cereal production has been a tenet of national policy, the price difference for cereals between neighboring states has been a major cause of regional trade or smuggling. Thus, almost 70 percent of the cereal trade (formal and informal) in the region of Mauritania, Mali, Senegal, The Gambia, Guinea Bissau, and Guinea involves rice and wheat flour purchased on the world market and re-exported from The Gambia to countries like Senegal and Mali.

The Sahel-Coastal West African (north-south) trade derives more from regional comparative advantage. Trade has historically linked the Sahel with the forest or coastal zones. Cowpeas traded from Niger to Nigeria; onions and dried tomatoes sold from Niger to Côte d'Ivoire, Togo, and Benin; and livestock exported from the Sahel to all coastal countries are examples of this regional specialization.

Livestock exports have traditionally been a major source of foreign exchange for Mali, Burkina

Faso, Niger, and Chad. Although West Africa has had a net meat deficit since about 1970 and continues to import meat products, especially from Europe, to meet its protein requirements, the Sahel will retain a surplus of cattle at least into the medium term and can help meet the demand for meat at the coast.

However, there are constraints to rapid growth in livestock exports from the Sahel to the coast:

- *Subsidized meat exports from the European Economic Community (EEC):* With a fall in incomes at the coast and consumers switching to less expensive sources of protein, EEC meat exporters have correspondingly switched from frozen hind and front quarters to turkey tails, chicken wings, and the like.

- *High transport costs and obstructions to trade* (especially illicit enrichment by customs and police officials) make regional products less competitive than European imports.

- *The growing overvaluation of the CFA franc* compared to the cedi (Ghana) and the naira (Nigeria) is making Francophone African products relatively more expensive for non-CFA franc consumers.

High transport costs could be reduced through increased competition and simplification in the business regulatory environment. Reducing other obstacles to trade is more difficult. In many cases, even the state has no control over the rent-seeking actions of its agents. Corruption and public administration problems cannot be solved by the state, one donor, or even a combination of both.

The most efficient approach seems to be to promote the emergence of organized private-sector interest groups, which can apply appropriate and socially sensitive pressure to resolve such problems.

The main factor over which most donors, or USAID Mission ADOs, have no control is the CFA franc and the readjustment policies of monetary zones in West Africa. Perhaps devaluation of the CFA franc will never happen. If and when it does happen, the short-term consequences for the CFA-zone countries will be very harsh. While Mali, Burkina Faso, and especially Niger would tend to benefit from such a devaluation, it is less clear that Senegal or Côte d'Ivoire would benefit unless complementary policies are designed to take them beyond the short-term.

It behooves us to understand the issues associated with a CFA franc devaluation and to plan appropriate policies and programs which can help deal with the disruption such a devaluation will certainly create.

John Holtzman: "Promoting Regional Trade in West Africa"

Opportunities for Regional Trade:

<u>Sahel-to-coast and coast-to-Sahel trade opportunities include:</u>

- Livestock, hides and skins, cowpeas, and onions produced in Sahel are marketed at the coast.

- Oilseeds and vegetable oil, grain, and tropical fruits produced in coastal West Africa are sold to the Sahel.

Formal trade between Francophone and Anglophone countries in West Africa declined dramatically during the 1970s and 1980s. The rising overvaluaton of the CFA franc relative to other regional currencies (e.g., the naira and cedi) was the main cause of this decline in formal trade. Low and stagnant real incomes in coastal countries were also an important factor. Because exchange rate adjustment for the CFA franc has not been considered, to remain competitive Francophone countries will have to reduce costs, wages and prices. Wages in CFA franc countries are about double those in non-CFA nations.

As incomes increase over the medium to long term in the Sahel, and as coastal countries do more processing of coffee and cocoa, these commodities could also be shipped north.

Intra-Sahel regional trade opportunities are limited, given similar agricultural production patterns and climate/weather. Transport costs are also very high because the best roads and rail links are to the coast.

Sahel products to European and other world markets:

- Only a few agricultural commodities are high enough in value to be profitable exports to developed countries. Most market opportunities for Sahelian countries lie with coastal trading partners.

Potential Benefits from Expanded Intraregional Trade:

- *Internal markets of Sahelian countries are limited:* Relatively small and dispersed populations with low and slowly growing incomes in the Sahel limit consumer marketing opportunities. There is scope for increased urbanization in the Sahel, which, if accompanied by rising incomes, could provide more market opportunities.

- *Profitable production possibilities are limited in the Sahel:* Many agricultural commodities produced in Sahel are available on the world market at low prices (e.g., rice and maize).

- *Promoting intraregional trade in commodities for which the Sahel has comparative advantage:*

  – Expand markets for Sahelian producers so that incomes can increase.
  – Lowering trade barriers in the region as an important initial step toward greater regional market integration. West Africa may need to integrate as a regional trading bloc to survive economically as other regions of the world create their own trading blocs. Coordinated regional trade policies could help combat excessive dumping of agricultural commodities by the EEC.

- *Stronger trade links among Sahelian and coastal countries can reduce food aid requirements in years of drought,* assuming Sahelian consumers have sufficient purchasing power to buy food from the market. Coastal countries can supply locally grown maize and rice or imported grain on a commercial basis.

What Can USAID Missions Do?

1. *In the short term, Sahelian governments and donors need to press hard for reduction of trade and transport barriers internally and to the coast.* Support trade and regulatory reform with other donors, especially the International Monetary Fund and World Bank, and monitor its impact on a continuing basis.

2. *Over the medium term, search for opportunities to address the CFA overvaluation issue* at high policy levels in regional and international discussion.

3. *Support domestic agribusiness development:* Work directly with the private sector, particularly traders and processors involved in export commodities in the Sahel (livestock, hides and skins, cowpeas), which are important in intraregional trade. Encourage trade association formations that can lobby Sahelian governments for policy and regulatory reform. Empower private agroentrepreneurs so they can exercise countervailing power against rent-seeking agents who are obstructing trade and agribusiness activities.

4. *Promote foreign investment.* Opportunities for investment in agroprocessing for export com-

modities in Sahelian countries are probably limited in the medium term. The Sahelian agricultural sector is subject to drought-induced shocks and potentially high risks. Domestic capital is scarce; foreign investment would be necessary. Processing for local consumption is possible, but processing for export would probably be more profitable, given the small Sahelian market size with low consumer incomes.

5. *Cautiously promote nontraditional exports.* Horticultural production and shipping costs are very high in francophone countries. Not many production areas are well suited to horticultural production; yet horticultural production is labor-intensive and well suited to smallholder production. Demand for horticultural products and other nontraditional exports (NTEs) is rising, however, and may provide windows of opportunity for the Sahel and coastal countries.

6. *Improve regional data base for agricultural commodities which are traded or potentially tradable*. Sahelian exporters have poor access to reliable, timely market information about coastal and international markets. Limit number of markets and products for which data are collected. Define observation unit well (by commodity, unit of measurement—volume and grade, by season, etc.).

7. *Strengthen the ability of the private sector and government to deal with periodic food shortages* through continued policy and regulatory reform, investment in narket information services, improvement of marketing infrastructure (i.e., roads, rail, market and storage facilities). Two key objectives should be to forge stronger trade links with coastal countries and to lower transport costs between the Sahel and the coast. Improve the management capacity of cereal parastatals and help them shift from monopsony buyers to agencies that facilitate and complement the private sector (as in the case of OPAM, the Malian cereals marketing board).

West Africa Discussion Group Recommendations

1. *CFA franc exchange rate issue*. USAID should finance studies of the likely impact of CFA franc devaluation on the agricultural economies in the region to determine positive and negative impacts to prepare USAID Missions and African countries for actions under a liberalized CFA franc regime.

2. *Support regional collaboration on trade policy issues.* Strive to promote a more consistent set of national economic incentives for intraregional trade; regional collaboration on the issue of appropriate protection (tariff levels, variable levy systems, quotas) against "dumping" of agricultural commodities should be encouraged.

3. *Support national and regional reform of policy and regulatory barriers to intraregional trade.* Eliminate export and import taxes and other taxes and levies that restrict formal trade and monitored reforms to ensure that they are enforced effectively by lower-level government officials and understood by private-sector entrepreneurs.

4. *Involve African governments and private sector in market analysis and share results of studies with other donors*. Improve the empirical base upon which government and donor policies and programs are formulated. A first forum for sharing research results could be at the USAID November 1992 REDSO Scheduling Conference in Abidjan.

5. *Empower private trade associations.*

6. *Continue to support donor collaboration*. Work with regional organizations (e.g.,

CILSS and ECOWAS) to reduce trade barriers and improve regional infrastructure (hardware and software, such as market information systems).

7. *Fund research on the comparative advantage of the region.* The largest and closet consumer market with the most purchasing power is in Europe. What commodities should we be encouraging Africans to produce for those high-value commodity consumer markets based on the region's comparative advantage.

2. East Africa Regional Trade

David Martella, ADO, REDSO/ESA
Kurt Fuller, ADO, USAID/Rwanda

David Martella and Kurt Fuller: "Regional Trade Discussion Results"

Points of Discussion

1. *There is existing informal regional trade.* But there are legal barriers to expanding informal into formal trade. Much informal trade is in the form of barter, partially because of the volatility of the currencies. (For example, for the past year, Ugandan exports to Zaire and Burundi have ben paid for with U.S. dollars, gold, or, more often, consumer goods.)

2. *Regional trade consists primarily of basic foodstuffs.*

3. *International exports consist of both "traditional" bulk commodities* (e.g., coffee and tea) *and nontraditional high-value, consumer-oriented exports* (e.g., fish, fruits and vegetables, sesame, spices, and flowers). But there are high transportation costs and insufficient quality controls in place in the region to facilitate a quick expansion of high-value, consumer-oriented exports.

4. *The most success in agricultural nontraditional exports (NTEs) has come where there has been little or no government involvement* (e.g., Kenyan horticulture). An appropriate role for government might be to facilitate improvements in the international communications networks for telephone services, fax services, etc.

5. *What are the national comparative advantage commodities* and are there any regional similarities that could lead to regional rivalries, competition, and barriers to more free trade rather than regional integration? For example, maize, beans, and fish are all produced and traded in the region.

6. *What will happen to government revenue as barriers to trade are lowered by reducing import/export taxes?* We should assist governments to realize that by reducing barriers to trade, more commerce should flow through the formal sector, enabling government to capture revenue that is not being accrued. Ten percent of 1,000 is better than 100 percent of zero!

7. *What will future EEC policies be towards former colonies and the African, Caribbean, and Pacific countries eligible for special consideration from the EEC under the Lome Convention?*

Recommendations

1. *Look at what is successful* in the region, commodity by commodity, and analyze new short- to medium-term opportunities for additional quick economic growth.

2. *Meet and discuss with agribusiness entrepreneurs* what USAID can do to help their efforts. There has been a lot of work with private agribusiness groups in Uganda and Kenya; more could be done there as well as in other countries.

3. *Build the capacity of local agribusinesses to agitate for reform*.

4. *Look to international markets*, not just regional markets. Developed countries buy 83 percent of all world exports. New markets are opening in Eastern Europe and the Newly Independent States of the former Soviet Union. Find the markets and get African products to those markets.

5. *Do additional analyses of international*, especially European and Middle Eastern, *high-value, consumer-oriented horticultural markets*. Get that market information into the hands of the local entrepreneurs and help them reach those markets by any means necessary.

3. Southern Africa Regional Trade

Joanne Hale, ADO, USAID/Malawi
Bob McColaugh, ADO, USAID/Botswana

Joanne Hale and Bob McColaugh: "Regional Trade Discussion Results"

Information

- *Botswana* imports 80 percent of its food and is the largest exporter of chilled beer in Africa.

- *Malawi* is the second-largest exporter of barley, the third-largest exporter of dark fire tobacco, and the seventh-largest exporter of flue-cured tobacco. Malawi also exports cotton and ground nuts.

- *Zimbabwe* exports latex rubber shoes regionally (10 percent of total exports) and is the largest exporter of tobacco in Africa.

- *The Republic of South Africa* (RSA) offers great market potential for neighboring countries because of its relatively large consumer-oriented market. The RSA imports beef, sheep, goats, chili peppers, pinto beans, and sorghum. The RSA has also improved the movement of the goods through investments in market infrastructure (e.g., roads, sea and airports, and railroads).

- There are common customs regulations and an existing *Preferential Trade Agreement* in several countries. These agreements on trade and tariffs and mutual acceptance of free-floating currencies is facilitating regional trade.

Potential and Existing Problems

1. Will a common currency be negotiated, or will the RSA rand take over currency markets de facto because of the relative strength of the RSA economy?

2. The regional drought, initially, has had a positive effect on regional trade and so have USAID food aid programs (PL 480 imports), but what will the medium-term effects be? For example, there may be drought induced distortions in local production and marketing.

3. Transport infrastructure is oriented toward seaports for export and not structured to facilitate inter-regional trade.

4. Political instability in the RSA and Mozambique create uncertainties for the region.

Recommendations

1. *Continue support for market liberalization* and tariff reform to facilitate regional trade.

2. *Analyze the type of marketing infrastructure necessary* to support improvements in regional trade.

3. *Discourage the "Buy America" USAID mandate,* so that most economical suppliers can be used for commodity programs.

4. *Support the Preferential Trade Agreement.*

5. *Promote the work of national governments and regional authorities* to ensure that the Southern Africa Development Coordination Committee (SADCC) fulfills its mandate.

6. *Support a computerized information base* that could link agribusiness firms with information on markets for commodities and their comparative (cost) advantage.

Afternoon Theme:

U.S. Agribusiness and Trade Associations: Partners in Development in Sub-Saharan Africa

BUSINESS LUNCHEON

Moderator: John Nelson, Ph.D., Vice President for Science and Technology, McCormick & Co.
Guest Speaker:
Thomas A. MacMurray, Ph.D., Vice President for Technical Development, H. J. Heinz Company

Thomas A. MacMurray: "U.S. Agribusiness and Africa"

I must clarify at the outset that my active involvement, and that of Heinz, in sub-Saharan Africa is not as complete as it is for other parts of the world like Asia and Eastern Europe. My visits have been confined to Zimbabwe (twice) and South Africa (five times—the first being in 1964). However, because of my British heritage, I feel I know many of these countries well.

I propose to tell you some history of Heinz's involvement with sub-Saharan Africa—the countries we have looked at, our successes and failures, and *why we are cautious about moving forward with any business initiatives in this region.*

I will also explain from my personal experiences on other continents *what kind of a relationship a company like Heinz would like with the U.S. Government*, particularly with USAID.

I feel very strongly that U.S. business and the government should operate synergistically—for mutual benefit—and that an agribusiness is an excellent vehicle to provide substantial infrastructure in a developing economy.

First, let me start by saying that Heinz is more than a ketchup company. Tomato-based products, ketchup included, account for about $1.5 billion of our total sales of approximately $7 billion. We are the biggest processor of tomatoes in the world, processing around 1.75 million metric tons per year.

We also share the world's number one position in baby food production (just under $1 billion in sales) with Gerber, although our international presence and diversity is greater. For example, we manufacture and have a 95 percent share in Italy, 80 percent share in Canada and Australia, close to 60 percent in the United Kingdom, 40 percent in Venezuela, more than 50 percent in China, and a small market presence in Thailand. We obviously sell in many more countries, but those I have mentioned are where we *manufacture* infant foods.

Heinz has been international for over 100 years—the U.K. company was founded in 1885—and about 40 percent of current revenues are earned overseas. Because we believed that Heinz was a truly international company, it came as rather a shock to discover that, in 1980, 85 percent of the world's population had not yet been exposed to the Heinz brand.

We also found, and it remains true today, that in the Western industrialized markets of Europe and North America, food consumption was not growing by more than 1 percent per year.

While some companies, especially at that time, would have characterized the developing nations as demoralized, impoverished, and backward, Heinz did not and does not. We have seen countries in the Pacific Rim raise their combined gross national product by *$3 billion a week* and have witnessed the "McDonald'sization" of the world as peoples' tastes move more toward the Western diet.

Rather than plant our flag and hope for the

The H. J. Heinz Company was founded 123 years ago in Pittsburgh by Henry J. Heinz, although that name is now used on only about 35 percent of our product lines. Other brands purchased over the years have their own intrinsic strengths: *Ore-Ida* is a market leader in the United States for frozen potato products; *StarKist* is a market leader in canned tuna; *Orlando* is a popular tomato product name in Spain; *Plasmon* is our baby food company in Italy; *Weight Watchers International*, the world's largest weight-loss classroom company with over 1 million people in class in any one week, and *Weight Watchers Food Company*, the food manufacturing sister company, are also our subsidiaries. There are also a host of minor brands like *Chico San*, our cereal cake business, and *Near East*, our rice business. Heinz also owns a $700 million pet food company and a $200 million frozen-food bakery company, and shares the number one position in the food service industry with another company in the United States.

best, *we believe it far more prudent to seek an experienced and knowledgeable partner in each region we enter.* That partner may be a successful private business or it may be the host government.

Before we begin our courtship of a prospective partner, we ask ourselves how well that company reflects the criteria we have devised to assess a project's desirability. Such criteria include:

- A company whose field is, or is closely related to, the food business.
- A company staffed by nationals and not reliant on expatriates.
- A company of sufficient size to serve as a continental base for expansion within the country and the region.
- A company not heavily dependent on imported raw materials.
- A company not dependent on exports and with ready markets for its products within its own country.
- A company with good profit potential to justify the greater risk of investment in the Third World.

We do similar evaluations of prospective host countries, taking into account such elements as natural resources, balance of payments, population size and growth rate, political stability, tax and pricing policies, insurance, and potential for economic growth.

These criteria are not mere talking points; we take them very seriously and apply then strenuously. *We have withdrawn from initiatives in both Africa and Asia when conditions proved unsuitable.*

In *Zambia*, for example, we had hoped to conclude an agreement that would have given U.S. a substantial position in the oils and fats market in that country. But the Government of Zambia and the International Monetary Fund clashed over mechanisms for control of the economy. As a result, we did not invest in Zambia.

In North Africa, Heinz has recently concluded a joint venture in *Egypt*, but in sub-Saharan Africa our success rate has been variable, at best. We have examined countries like *Kenya*, *Cameroon*, *Nigeria*, *Ghana*, and *Côte d'Ivoire*. We have factories and collection stations for StarKist in the last two countries, but generally the new companies and investment opportunities we have investigated have been unacceptable.

In *Zimbabwe* in 1982, we were more successful in concluding a deal with the government whereby we acquired a 51 percent share of a company. This has been a successful enterprise for us and for the Government, which has been collecting roughly 78 percent of every pretax dollar of profit, with the remaining 22 percent going to Heinz. This does not take into account additional revenues from direct and indirect taxation from the company's more than 1,500 employees. However, of late, even here price controls have squeezed margins.

The multinational talent already available among Heinz's management has been a significant aid to the initiation and development of our

Third World enterprises. Once in place, our operations are managed by nationals as much as possible. This too bespeaks our cultural pragmatism. We're not doctrinaire about it, but *we have a predilection for competent, imaginative locals.* We think they know their own countries better than we ever can.

The edible oil business in Africa is a crucial one. After maize, oil is the second most important element in the sub-Saharan diet, therefore ranking high on the list of essential commodities.

Olivine Industries, the company that we acquired, was the market leader in edible oils and the largest producer of soap in *Zimbabwe*. Their plant was extremely sophisticated, using the most modern technology. Their main raw materials—soya beans and cottonseed—were locally grown, and the quality of their finished products was very high, readily acceptable not only everywhere within Africa but also in Europe and the Middle and Far East.

In 1986, we introduced Heinz Baked Beans and Tomato Soup into Zimbabwe, initially under a copack arrangement but more recently in 1991 by building and equipping our own factory. This was accomplished by designing the line from surplus equipment from European affiliates, shipping to Zimbabwe and installing and commissioning with assistance from Heinz U.K. Prior to that, starting in 1982, *we had initiated trials of Michigan pea beans to avoid costly shipment from North America and Canada.* After much effort by Heinz agronomists, this has proven to be successful.

In 1988 Heinz acquired *Kgalagadi Soap Industries (KSI)* located in Gaborone, *Botswana*'s capital. Although the population is only around 1 million, its membership of the Southern African Customs Union allows it duty free access to a market of 35 million.

I believe that USAID's program in Botswana is one of the highest per capita aid programs in Africa, and *one of the most successful USAID activities is the development of skilled manpower to fill critical jobs*. Probably this is why a Heinz report of two or three years ago stated that Botswana is currently experiencing an economic boom.

Let me discuss how I believe that USAID and companies like Heinz can cooperate and where we would like assistance.

1. Education

When we evaluate companies in new countries, we require a tremendous amount of assistance. Mostly, we rely on the local nationals, but increasingly we have become involved early on in programs of assistance for issues like agronomy advice, crop selection and cultivation techniques, nutrition education involving nutrition symposia, and teaching skills in management, marketing, accounting, product development, quality assurance, etc. *USAID could provide analytical and technical assistance for some of these activities.*

We understand that we have an obligation to train people to operate equipment, run the business, etc., but in some countries the needs extend to basic education and training. To be useful, this must be clearly focused, relevant to the companies' needs, and cost effective. We suggest that *there is a role for USAID in supporting basic business education and technical skills training in cooperation with investors* like Heinz.

2. Agronomy

Whenever it invests, Heinz works with local farmers and scientific institutions on the selection and improvement of host countries' fruit and vegetable output and quality. This investment improves yield per hectare, contributes training and materials for safe disease and pest resistance, and provides seed support and other hands-on assistance programs to ensure the production of ecologically and environmentally pure raw materials.

Heinz also works with local farmers and producers to assist them in preparation of raw materials to meet top specifications. Such preparation adds value to the raw materials, assists the factory in being more cost effective, and provides employment in rural areas. This has the added bonus

Since its founding in 1869, the H. J. Heinz Company has supported activities that facilitate the development of nutritional sciences in its major Western European, Australian, and North American markets. It is a founding member of the Nutrition Foundation, which is now part of the International Life Sciences Institute in the United States and the National Institute of Nutrition in Canada. Heinz publishes nutrition newsletters to update health professionals on developments in nutritional sciences, information booklets, and brochures for consumers, and scientific texts.

of lateral disbursement of income in the community and reduction of urban migration.

Heinz requires high-quality raw materials to produce quality products that conform to our international standards. *Many of our joint venture partners seem ignorant of the scale and cost of efforts to deliver raw materials that are globablly competitive in quality and cost.*

Thus, we have reluctantly become involved in tackling basic agricultural production issues such as:

- Gathering the basic agroclimatic information and determining a feasible, potentially profitable crop mix profile, and
- Reviewing the production resources on the farms, in terms of equipment, seed fertilizer, chemicals, labor, and technical support, and determining requirements for production of world-competitive crops from among those in the feasible crop profile.

We try to do what we can with a limited budget, which we assess as justified in this high-risk venture.

Heinz does not want to grow and harvest crops. Our skills are in the conversion of raw materials to added-value products and marketing, distributing, and selling them.

But here is *another opportunity for USAID: to help Africans and their institutions become better trained so that they can produce commodities that meet international marketing standards.*

3. Nutrition

In the last decade, to further our role as the premier advocate for infant nutrition and purity in baby foods, Heinz established a nonprofit organization—the Heinz Institute of Nutritional Sciences (HINS). HINS promotes and dessiminates current knowledge in the field of maternal and infant nutrition, such as through annual worldwide symposia that bring together internationally renowned academics, nutritionists, and medical professionals. HINS supports research efforts in the field and disseminates the results to experts and consumers.

This year, the seventh annual HINS Symposium will be convened in Shanghai, China, and the focus will be breastfeeding. Medical doctors and nutritionists from the United States and Canada will participate with their Chinese hosts. All proceedings are published in English and the local language; simultaneous translation is always available.

Summary and Conclusion

These activities in education, agronomy, and nutrition do not come cheaply. It is expensive for us to transport operators of roller driers from the developing world to Canada or Italy for on-the-job training or to arrange training in the United States and Europe for African accountants and marketing personnel, and their research-and-development and product developers or for Zimbabwean quality and process engineers.

It is expensive to conduct field trials for new crops with new methods under the necessary supervision; travel costs, honoraria for first-class academics, and translator costs boost the budget for holding symposia and other meetings on nutrition and infant feeding practices.

I get quite envious when I see the policy of some other countries. They appear to argue for,

among other things, a cooperative policy between government and industry more along the lines of the Japanese Ministry of Industrial Trade and Industry.

The food and fiber agribusiness is the largest industry in any country. It creates, I believe, the most widespread ripple effects. For example, processed foods must be packaged. Packaging requirements create skills and jobs in such areas as handling systems, package design, label design and graphics, and printing inks. Equipment needed for such operations leads to involvement with computer controls and to electrical and electronic engineering, etc.

Heinz provides all these skills and more.[2] Heinz, like the other multinational food companies, is keen to expand overseas. There is a strong profit motive to be sure, but there is, I sincerely believe, an enormous benefit to the recipient country. As we spread our net ever wider, we can certainly use all the assistance we can get. *We would like to work with you to fulfill all our mutual expectations.*

[2]A book on food safety, based an internal company document, has recently been published by Heinz and is now available for the food industry at large: *Principles and Practices for the Safe Processing of Foods*. This book demonstrates the methods and guidelines whereby food processors can safely manufacture wholesome foods under controlled conditions by using total quality management (TQM) and longitudinally integrated safety assurance (LISA) approaches. It describes a wide range of strategies, principles, and practices that may be used, including the establishment and use of hazard analysis critical control point (HACCP) techniques, pathogen profiles, and a discussion of microbiological criteria together with data tables.

Session 3: FROM POLICY REFORM TO PRIVATE AGRIBUSINESS DEVELOPMENT

Purpose of the Session:

To inform private U.S. agribusinesses of USAID policies and programs and to respond to Mission ADO requests for information on what services U.S. agribusinesses and trade associations can offer to assist in the development process.

Moderator: Dennis Panther, ADO, Togo

Presentations: Jerry Wolgin, AFR/ARTS: "The Policy Reform Approach"
Warren Weinstein, AFR/ONI: "The Trade & Investment Approach"
Rosemarie A. Kelly-Rieks, Manager, Overseas Training Programs, Land O'Lakes, Inc.: "A USA Agribusiness Perspective"

Jerry Wolgin: "The Policy Reform Approach"

For policy reform programs to succeed, it is essential that those who will make the policy reform and those who will be affected by the policy change work together to solve the problem.

In 1985, the Africa Bureau of USAID became involved in economic policy reform efforts. We have funded programs of about $100 to $200 million per year since then with between 50 and 60 percent of them focussing on the agricultural sector, especially marketing reform and liberalization.

For example:

- In *Mozambique*, we have supported price liberalization and fertilizer marketing reform.

- In *Cameroon*, we have supported the privatization of fertilizer marketing and seed marketing.

- In *Mali*, we supported the privatization of both input and output marketing, especially transport, which led to savings of 50 percent on transport costs.

- In *Sierra Leone*, our analysis helped to convince the government that sewing machine imports should be considered equipment for small and medium-sized enterprises and, therefore, subject to lower import taxes rather than be classifying and taxing at a higher rate as consumer goods.

Our funding helped reduce the costs of these policy reforms to African governments and helped stimulate the private sector to make investments in agricultural marketing activities.

In particular, by making reforms in the foreign exchange regimes and easing access of private agribusiness to foreign exchange, we have helped to stimulate exports.

We have learned that economic policy reform is a necessary, but not sufficient, condition for private agribusiness development.

Policy changes must be linked with other direct, project-type assistance, especially because some policy and regulatory changes involve complicated implementation processes. In addition, private agribusiness may need help in taking up marketing activities from which they were excluded *de jure* for so many years.

Now we are balancing policy change and assistance to private firms, in an attempt to energize the private sector and promote nontraditional exports. Also, USAID is involved in natural resources reform programs to shift control of forest resources to local people. We have had some success in these areas in the Sahel.

Warren Weinstein: "The Trade and Investment Approach"

USAID needs to educate the U.S. agribusiness community about what we are doing to help development in Africa and to help educate the U.S. agribusiness community about where there might be opportunities for them to participate. The U.S. agribusiness community is largely ignorant about Africa, its agricultural products, and its economic development prospects.

USAID only gets involved with reforms when a host country is ready for policy reforms or is already implementing them. *We work to pull private-sector Africans and African associations into negotiations to encourage the development of agribusiness.* Missions work with African entrepreneurs to get ideas up to the point where they can collaborate with existing business.

USAID is working with the African Project Development Facility (APDF), a multidonor-financed institution with offices in Kenya and Côte d'Ivoire, and with the Equity Management Company; we are also trying to launch the Africa Growth Fund.

Many Missions are involved in training Africans to be good agribusiness owners and skilled agribusiness technicians. From Washington, we facilitate negotiations and offer technical and analytical support to our field Missions. But commitments to work with APDF, and for training and finance, are all decided at the field level.

We plan to support agribusiness investment missions, involving Africans, to get U.S. agribusiness leaders to explore trade, joint-venture partnerships, and investment opportunities. For example, AFR/ONI is considering organizing, with AFR/ARTS, a trade and investment mission to anglophone Africa to include The Gambia, Ghana, Uganda, Tanzania, and possibly Zambia.

We are supporting Missions that are promoting Export Processing Zones in African nations, such as Cameroon, or special regimes to cut through bureaucracy. We are leveraging assistance for agribusiness development by working with USDA, the International Finance Corporation at the World Bank, the Overseas Private Investment Corporation, and the Africa Business Roundtable.

Marie A. Kelly-Reiks: "A U.S. Agribusiness Perspective"

Land O'Lakes, Inc., is a marketing and supply cooperative owned by more than 300,000 farmers. Its board of directors created an International Development Division, which can help facilitate the development of agricultural cooperatives in the developing world, including sub-Saharan Africa.

Indeed, we are planning to become active in sub-Saharan Africa at this time. We are involved in high-level public relations work to position the company for future investment overseas.

Our activities include studies and needs assessments and training, both in the host country and in the United States. Our plans include:

- working to strengthen a dairy cooperative in Cameroon,
- doing a marketing feasibility study in the Gambia, and
- promoting dairy development activities in Mali.

Our international corporate strengths are in:

- Agricultural products, especially feed, seed, and agronomy; and
- Dairy food products, as food ingredients and for consumer and food services companies.

We are looking forward to working with USAID to promote our mutual beneficial interests in dairy and agricultural cooperative development in Africa.

Session 4: TRADE ASSOCIATION BREAK-OUT GROUPS

Purpose of the session:

To enable USAID Mission ADOs to discuss specific agribusiness development problems with American agribusinessmen and women and to learn what services or advice they can offer to help resolve problems and create marketing opportunities.

Group 1. Agricultural Inputs

Moderator: Rich Newberg, ADO, USAID/Burundi
Discussants: Steve Adams, Associate Director, Agricultural Research Institute
Ed Chonsey, Senior Vice-President, Pioneer Hybrid International
Dr. Surjit Sidhu, Economist, International Fertilizer Development Center

Problems Identified by U.S. Firms and USAID

1. African firms and USAID Mission ADOs need ideas about where to go for advice and services from U.S. agribusiness firms.

2. U.S. agribusiness lack both the knowledge and the historical experience of dealing or trading in Africa. *There is a lack of adequate information about African agribusiness opportunities in the U.S. business community and a lack of understanding about where to get such information.*

3. US Agribusiness firms need to know where to go to get information about opportunities for marketing their input supplies, such as pesticides. U.S. environmental regulations on pesticide use are a constraint to research and marketing for both U.S. firms and USAID.

4. Producers need better technological inputs in Africa. The issue is usually one of access , both in the marketing system and at the farm level. Access to capital, in the marketing system and at the farm level, limits adoption of new technology.

5. The limited market in most African countries, in terms of the size of the market (consumers) and the level of income of the consumers, creates a limited market for agricultural inputs and technology. For example, there is limited foreign exchange available to buy fertilizer for crops that are not exported.

6. U.S. agribusiness perceives high risks associated with trying to do business in Africa that relate to political, regulatory, financial, and business concerns, especially government attitudes toward private business in general in their own countries and toward foreign investment.

Opportunities for U.S. Agribusiness and USAID

1. *Increase the amount of information available* to the U.S. agribusiness community through wider dissemination of studies of the policy and regulatory environment and the potential for agribusiness investment (including start-up costs), on a country-by-country basis.

2. *Encourage U.S. agribusiness trade and/or joint ventures* with the appropriate-size Af-

rican firms for agricultural inputs (such as for cross-breeding of livestock, scale of biological nitrogen fixing operations).

3. *Use existing agribusiness or U.S. Government services and/or organizations to track positive changes in the African investment environment.* The changing political landscape is creating a more attractive regulatory and policy investment climate.

4. *Promote wider dissemination of ongoing or planned USAID studies* of the investment climate and agribusiness opportunities in Africa. Privatization and liberalization are creating new opportunities in many countries.

5. *Disseminate information on successful U.S. agribusiness investments or trading activities in Africa,* such as H.J. Heinz (Zimbabwe), Pioneer Seed Co. (Cameroon), and other examples.

Group 2. Perishable High-Value Commodity Marketing

Moderator:

Gaoussou Troare, FSN ADO, USAID/Mali

Discussants:

Doyle Johnson, Agricultural Economist, USDA Economic Research Service
Jodean Bens, Manager, United Fresh Fruit and Vegetable Association
Dr. Frank Terwilliger, (Retired) Senior Vice President of Packaging, Campbell Soup Co.
Nancy Tucker, Vice President for Communications, Produce Marketing Association
Joan Leavitt, Vice President, Volunteers in Overseas Cooperative Assistance
Kate Campana, Africa Regional Representative, Volunteers in Overseas Cooperative Assistance

Points Raised in Discussion by USAID and U.S. Agribusiness Representatives

1. There are *excellent opportunities right now for exporting high-value horticultural products,* especially fruits, vegetables, flowers, and ornamental plants. Indeed, the best opportunities may be in the nonedible plants (e.g., there are 150 edible and 150 nonedible items being traded in international markets). There has been insufficient research in this important area by USAID and African businesses.

2. *USAID, therefore, should identify and bring agribusiness representatives from Africa to meetings in the United States,* such as those sponsored by the Produce Marketing Asso-

PRODUCE MARKETING ASSOCIATION (PMA):

We have expertise in marketing with representativesin 34 countries. PMA provides training and advice to members on:

1. Quality standards;
2. Cooling requirements;
3. Rules and regulations for product marketing in each country;
4. Quality of packaging materials required for products and markets; and
5. Logistic advice—how to get your product from the airport to the market destination.

ciation, United Fruit and Vegetable Association, and the like. This will help USAID Missions to determine what information is available in Africa and what information agribusinesses still need. Entrepreneurs need to go to the market, see what is needed there, and then find the technology to deliver it so that it meets those specifications. Foreign contacts in the foreign markets are critical sources of information.

3. Can U.S. private agribusinesses or USAID provide *seed money* for some export marketing development activities in Africa? This issue deserves consideration by firms and USAID. Africa could provide alternative sources of supplies of high-value commodities for companies that may not have year-round, reliable, inexpensive suppliers now.

4. What can be done to reduce U.S. import restrictions and open our own markets to products from other countries?

5. Do U.S. trade associations have, or can they establish, a system to work with similar associations in Africa?

6. *Low labor costs do not ensure financial success in marketing high-value horticultural commodities.* Skilled management and trained labor at all points in the production and marketing chain are critical to export success. The focus should be on producing a high-quality product that has the best "out-of-season" marketing opportunity.

7. The *major market for edible foods* imports (and, therefore, exports from Africa) is still Europe. Africa is losing its share of this trade because of:

   - poor access to *information* on market demands;
   - poor *location* of many producing and export zones in Africa in relation to the ultimate market destination;
   - *trade barriers* (policy and regulatory) in Africa and export destination countries;
   - *transport problems* and the resulting high marketing costs;
   - poor selection of *varieties and markets*; and
   - poor *quality control.*

8. USAID should help Africans identify suitable products and markets for those products, who the competitors are, where the market volatility exists, and what the window of opportunity is in the market. For example, with current technology, exporters can put fruits, flowers, and vegetables "to sleep" for two weeks, stopping the ripening process during transport to market.

UNITED FRUIT AND VEGETABLE ASSOCIATION:

We have formed this organization so that the various members of the industry can work together to solve problems of common concern. We represent the members of the association and voice their concerns with the U.S. Government and the various agencies whose regulations affect our business. We do educational and promotional work with consumers to encourage them to buy and eat more fruits and vegetables. We can help African exporters and USAID Missions in the following areas:

1. Integrating new businesses into a network of similar agribusiness contacts;
2. Providing new companies with some recognition;
3. Providing information services;
4. Providing liaison services between agribusiness and the U.S. Government;
5. Working with agribusiness to promote their products; and
6. Providing market and product educational services.

9. In packaging perishable commodities for markets, the following are essential to ensure marketing success:

   – The product must be of superior quality. The three most important ingredients in successful high-value, consumer-oriented exports are: quality, quality, quality.
   – Identify local resources to meet packaging types and needs.
   – Select the appropriate type of container for the specific product (e.g., certain products may benefit from being packed with in-box cardboard dividers, an egg-crate system of packaging, reinforced or corrugated cardboard boxes, wooden boxes).
   – Wooden pallets (standard international size for exports is 1 by 2 meters) should be used for shipping export cartons so that the perishable commodity does not sag during shipment.
   – Metal straps and bands to secure (shipping) boxes of perishable fruits and vegetables to wooden pallets are superior to plastic bands.
   – Identify what will extend the shelf life (in terms of packaging and preservatives technology) and use it. For example, plastic wraps can form barriers against the elements (e.g., moisture, carbon dioxide, nitrogen, oxygen) and thus extend the shelf life of products. Plastic wraps, when used in conjunction with temperature control can extend shelf life and keep product quality high in transit to market.
   – The packaging should be related to the kind of distribution (e.g., wholesale—which will then be repackaged by the retail seller—may require less attractive and less costly packaging, whereas ready-for-retail sales will require more attractive and more specific labeling on packaging).
   – The packaging should fit neatly on top of the pallet and not hang over the edges.
   – One-hundred fifty countries ship into the New York City markets daily, all trying to meet the best *quality standards for their commodity*, so competition is fierce.
   – The packaging should indicate or describe the quality and quantity of the commodities enclosed. Know the packaging regulations and requirements of the export destination being targeted (e.g., Germany requires corrugated wax boxes for horticultural imports).

Group 3. Food Processing and Food Safety

Moderator:

Kurt Fuller, ADO, USAID/Rwanda

Discussants:

Dr. Arnold Denton, (Retired) Senior Vice-President, Campbell Soup Co.
Dr. George Purvis, Vice-President—Scientific Affairs, Gerber Products Co.
Marie Kelly-Rieks, Manager, Overseas Training Programs, Land O'Lakes, Inc.

Points Raised in Discussion by USAID and U.S. Agribusiness Representatives

1. For importers, the following agencies are involved in certifying commodities entering the United States:

   – U.S. Department of Agriculture (USDA): Gives country approval for USDA products;

- Food and Drug Administration (FDA): Checks product labels; and
- FDA, with USDA assistance: Establishes the regulation base.

2. Potential resources: USDA's Office of International Cooperation and Development (OICD) and the International Executive Service Corps can do a U.S. marketing study for African firms seeking export markets here in the United States.

3. For a private agribusiness that wants to set up a company, affiliate, or subsidiary in a new country, the following caveats should be followed:

   - Know the risks involved in your investment in the country, the length of time until the project is near completion, and the level of government involvement necessary to ensure commercial success.
   - Get a host country person (preferably within the government agency responsible for attracting foreign investment) who knows the regulatory and legal system to work with you and your company.
   - Do studies of the production and marketing capabilities in the country, market research just as done in the United States—nothing fancy, just lots of hard basic fieldwork.
   - Invest your own time in this country by "walking the streets," finding other organizations in business, and asking to see what they are doing and how well their business is doing.
   - Offer price incentives, targeting, and technical assistance to get farmers to improve product quality.
   - Develop production capability while maintaining good relations with producers; without disturbing local prices, begin to stimulate production once the new processing plant is on line.

Group 4. Wholesale and Retail Food Distribution

Discussants:

David Morrisette, Executive Director, Association for International Commercial Development

Jose Catita, Director, International Trade, Giant Foods Inc.

Points Raised in Discussion by USAID and U.S. Agribusiness Representatives

1. Internships or training should be offered by U.S. agribusiness firms to African agribusinesses involved in wholesale and/or retail marketing.

2. USAID could supply information to U.S. businesses on African companies with potential to meet U.S. market standards.

3. USAID could facilitate presence of African companies at appropriate shows and fund follow-up visits to U.S. companies (including options for training with companies or provision of technical assistance by companies).

4. USAID could help find and train African entrepreneurs in the agribusiness community.

5. USAID could facilitate the development of good business relationships between agribusiness partners in the United States and Africa.

Session 5: SYNTHESIS OF TRADE ASSOCIATION BREAK-OUT GROUPS

Purpose of the Session:
To discuss the agribusiness groups' recommendations.

Moderator: Dr. Arnold "Bud" Denton, (Retired) Senior Vice-President, Campbell Soup Co.

Recommendations

1. *USAID should work with host-country governments to ensure that international property rights are guaranteed and laws regulating them are enforced.*

2. *USAID should communicate directly with the private U.S. agribusiness community on how USAID works and how USAID could help U.S. firms.* U.S. agribusinesses need basic information from all sources: what helpful links with the universities under the Board for International Food and Agricultural Development (BIFAD) or other programs that are funded by USAID can private U.S. firms access?

3. *When private agribusiness come to the USAID Mission or other government agencies, provide us with advice* on what size of project might succeed in the host country, what is considered viable, how much help USAID can give (if any), etc.

4. USAID advice: *Start small, and let the market grow.*

5. *USAID can help identify host-country agribusiness people for U.S. firms to begin negotiating for trade and investment purposes.*

6. *USAID can help firms analyze all aspects of the in-country transportation system and its various components and their costs.*

7. USAID advice: *Companies should do all their planning and technology development in the country with which they wish to do business* and not in the United States.

8. *USAID can help firms identify other marketing infrastructure (e.g., telecommunications, storage, electric power, water supply) issues and potential solutions to any problems for trade and investment.*

Improvements that Need Attention

1. Establish a system to obtain and share information more effectively between USAID and U.S. agribusiness firms.

2. How can we involve the U.S. Commerce Department more actively and the Chambers of Commerce of major U.S. market cities in our development efforts?

3. What expertise is needed by ADOs or from the private sector to meet host country and U.S. agribusiness expectations?

4. Should our focus be on the whole agricultural marketing system or only on a few key commodity systems? Take only one activity (commodity system) and assist it from point of production to the consumer?

5. How can we stimulate the U.S. private sector to become more involved in Africa? Six suggestions:

   – Educate the private business community.
   – Have USAID ADOs speak at U.S. agribusiness conferences.
   – Have interchange at conferences and trade

fairs.

- Invite private business to USAID conferences.
- Have information on respective national African government policies readily available to answer questions about the investment climate.
- Help African governments to design and disseminate information about their investment incentives to the U.S. business community.

Session 6: AGRICULTURAL DEVELOPMENT AND FOREIGN AID: VIEWS FROM THE U.S. CONGRESS

Purpose of the Session:

To have legislative aides from Congressional Agriculture Committees comment on U.S. foreign aid and the agricultural sector and to allow ADOs and agribusiness leaders to comment and ask questions.

Moderator: Gary Lewis, Lesotho

Speakers: Rose-Marie Depp, USAID Legislative Affairs Office

Lynnett Wagner, Counsel for the Majority, Senate Committee on Agriculture, Nutrition, and Forestry; aide to Sen. Patrick Leahy (D-N.H.), who is also a member of the Senate Committee on Appropriations

John Ziolkowski, Professional Staff Member for the Minority, Senate Committee on Agriculture, Nutrition, and Forestry; aide to Sen. Richard Lugar (R-Ind.), who is also on the Senate Foreign Relations Committee

Rose-Marie Depp

USAID needs more African success stories for Congress so that its members can understand better and more clearly the effectiveness of U.S. foreign aid programs and the constraints under which we operate in the developing world.

Lynnett Wagner

The Senate Committee on Agriculture, Nutrition, and Forestry has jurisdiction over the PL-480 Programs, the Food for Progress programs, the Export Credit Guarantee Program, and similar programs dealing with foreign aid.

There are several recommendations that I would like you to consider for the coming year. USAID should:

- Educate the new members of Congress and their staffs. Right now, we expect that fully one-third of the House of Representatives, for example, will be new members based on announced retirements and general voter dissatisfaction with the status quo in Congress.
- Initiate cooperative efforts to enhance your ties with the Black Caucus and House Select Committee on Hunger. Both groups would seem to be natural allies for USAID in Congress.
- Work more closely with the (U.S.-based) private voluntary organizations (PVOs) in your host countries in designing and implementing your USAID country strategy plans. PVOs are viewed favorably in Congress, and they are a fairly powerful lobbying group, which could enhance support for USAID in Congress.
- Consult more often and try to work more closely with private-sector groups, including U.S. agribusinesses and lobbying groups on behalf of the U.S. agribusiness community.

Budgetary pressure on all programs is increasing and it behooves USAID to build stronger ties with the various U.S.-based groups that participate in or that could be participants in our foreign assistance programs.

John Ziolkowski

I would just like to make a few observations today and then open it up to questions and answers.

USAID reports are read on the Hill. Thanks for sending them to us. Your "success stories" are very useful to us, especially in making arguments in support of foreign aid.

Although not many people seem to be in favor of them here, "earmarks" of funds are designed with good intentions by Congress as a method to deal with constituency groups that are powerful or influential in the Congress.

USAID, in my view, does have a role to play in agribusiness development and trade promotion in Africa. Other staff members in Congress feel the same way. Not all of the news is bad news for you today.

Gary Lewis: "Conclusions to Session 6"

Innovations for USAID to Consider

1. *"E-mail" our "success stories" to the Congress. Indicate to what extent USAID is doing well in each country.* Right now, Congress gets a lot of information, but not enough from the specific countries. Our stories should illustrate that U.S. foreign aid (tax dollars) is going a long way, document the in-country impact, document any (favorable) impact on U.S. employment and any U.S. use or consumption of foreign produce or products.

2. We need to *package USAID "success stories" better, in more innovative and attractive formats.* We should also include environmental aspects of our programs, the impact the programs have, especially where beneficial.

3. *Try to obtain more support from PVOs and the specific commodity groups that lobby Congress* according to their interests. Develop stronger coalitions to lobby for foreign aid programs accordingly.

4. *Try to identify all purchases made in Africa from the United States, or where the markets in Africa are for U.S. products and technologies, and from where in Africa the United States purchases commodities* (e.g., oil from Nigeria is not enough; cocoa from Ghana for Hershey would be a better example).

5. *Identify where USAID has the most experience or is the most effective in all stories* sent to the Congress and PVO or commodity interest groups.

6. *Educate new and reeducate old members of Congress.*

Cocktail Reception

Opportunity to meet with Congressional staff members, U.S. agribusiness and trade association representatives, and fellow ADOs.

July 15, 1992 (Wednesday)

Theme: *More New Approaches to Marketing and Agribusiness*

Session 1: OPPORTUNITIES FOR INNOVATIVE APPROACHES TO SUSTAINABLE MARKETING AND AGRIBUSINESS DEVELOPMENT

Purpose of the Session:
To share information with Mission ADOs on environmentally sound approaches to agricultural marketing and agribusiness development.

Moderator: Don Drga, ADO, USAID/The Gambia
Presentations: John Gaudet, AFR/ARTS/FARA ENV Unit, and Lori Ann Thrupp, WRI: "A Case Study from Ghana"
Bob McColaugh, ADO, USAID/Botswana: "Ecotourism in Botswana"
Mary Picard, AFR/ONI/WID: "An Overview of Sustainability"

John Gaudet and Lori Ann Thrupp: "A Case Study from Ghana"

In balancing the needs of environment and development, it is necessary to provide investment incentives without encouraging or subsidizing industrial pollution and environmental degradation.

One approach to resolving apparently conflicting aims of investors seeking to maximize productivity over the short term, and people seeking to ensure the long-term sustainability of the natural resource base, would be to bring such divergent groups together to design a resource use and management scheme that would allow for the use of a sustainable resource with safeguards on that use to balance the objectives of both groups.

It is important to create a climate that attracts critical long-term investment from entrepreneurs who have adopted a responsible approach to development. *The Investment Code must be positive and dynamic, allowing for incentives that reward investments that raise productivity and sustain the productive (natural resource) base of the nation.*

This case study examines the environmental and economic sustainability of an export-led growth project, the *USAID Trade and Investment Promotion (TIP) Project in Ghana*.

The primary nontraditional exports (NTEs) that the program will assist directly include pineapples, salt, prawns and shrimps, and furniture and other wood products. Indirect benefits are expected for other NTE commodity groups as well, including yams, kola nuts, palm oil, aluminum sheets, scrap metal, cocoa waste, and rubber sheets.

There may be some long-term negative environmental impacts from such efforts. Therefore, the TIP has anticipated some potential adverse effects and is designed accordingly. Examples of these efforts are listed here.

1. Tree Crops

Tree crops (e.g., oil palm, rubber, kola) are already well established in Ghana, either in smallholder stands or larger plantations. Sometimes new plantings are started on old cocoa plantations or on newly cleared forest or marginal land.

Impact Mitigation

Because new land clearing could encroach on forested land, the land-use patterns in areas of new plantations must be monitored carefully. Training of agroforestry extension agents, which has already begun in Ghana, must be encouraged so that the needs of farmers in such areas can be met.

2. High-Value Horticulture

Cultivation of *pineapples* for export has been confined to an area within a 50 kilometer radius of Accra. This pattern is likely to persist in view of the need to reduce transportation costs and avoid storage or transport losses. Increased pineapple cultivation in hilly regions could create some deforestation, soil erosion, and land degradation. Pineapple production and marketing also will involve the use of organic and inorganic fertilizers and agrochemicals. Improper use of inorganic fertilizers could lead to pollution of rivers and streams in the cultivation areas, which has caused concern among the general public and some Government of Ghana (GOG) agencies.

The Ghana Trade and Investment Program (TIP) is an $80 million effort to increase the capacity of the private sector to generate nontraditional exports (NTEs). Program components include a sector cash grant, local currency, technical assistance and training to improve the institutional capacity of the Ghana Export Promotion Council (GEPC), the Ghana Investment Center (GIC), and the Ministry of Trade and Tourism (MTT) to increase NTEs. The program will also address key financial constraints by assisting the Bank of Ghana and the Customs, Excise, and Preventive Services to initiate a refinance program, loan guarantee program, and a duty draw-back buffer account scheme, respectively. Technical assistance will also be provided directly to help exporters develop bankable projects.

Impact Mitigation

The Ministry of Agriculture and the Environmental Protection Council have started an effort to study and control the impact of agrochemicals. Detailed monitoring of the Densu River (the major river in the area) will be done to determine the rate of eutrophication.

However, training programs for both smallholders and workers on estates must be intensified, especially by using private agrochemical supply firms, which have a big stake in what happens in this commodity in Ghana. Such training would yield positive results by increasing awareness of the importance of correct preparation and maintenance of the land for sustainable cultivation.

3. Salt Mining

Much of the salt mining and evaporation for salt production goes on in the coastal and riverine lagoons. There are plans to increase salt production at the Songaw lagoon from 20,000 metric tons to 1.2 million metric tons. There will be new installations built along the northern shores of the lagoon, which has a total water surface area of 79 square kilometers.

These activities could adversely affect the balance of some natural lagoon ecosystems or possibly reduce the importance of certain lagoons as sanctuaries for migratory birds.

Impact Mitigation

The immediate and long-term impacts of increased salt production in the Songaw lagoon have been discussed by the relevant government ministries, concerned agencies, and nongovernmental organizations (NGOs). *USAID/ Ghana has made a firm commitment to review the expected environmental impacts prior to the provision of technical assistance to salt producers under the TIP Program.*

4. Fisheries

Shrimp and prawn harvesting are dominant. Shrimp and lobster exports have generally increased since 1984, but there is insufficient knowledge about the life cycle and reproductive biology of the local species being harvested. Furthermore, there are no reliable data on the actual tonnage produced annually or the amount that can be harvested from Ghanaian waters without depleting existing stocks. Current production comes entirely from capture fisheries and may not be sufficient to sustain export growth without being supplemented by a vigorous program of prawn and shrimp culture, for which only preliminary analysis has been done locally.

Impact Mitigation

More detailed studies of the fisheries biology are needed, especially of the local species. Moreover, there must be a system to provide reliable data on the actual tonnage produced annually and the amount that can be harvested in Ghanaian waters without depleting existing stocks.

The development of shrimp culture in many tropical areas has resulted in drastic ecological consequences, such as the destruction of valuable mangrove stands, eutrophication due to discharge of nutrient-rich effluents from ponds, and importation of diseases through the introduction of new species. Attempts to introduce prawn and shrimp culture into Ghana should be preceded by detailed planning and research to identify the most efficient and environmentally sound system for local use.

5. Forestry

With expansion of NTE agriculture, it is inevitable that marginal land will come under cultivation. Deforestation is already occurring at a rate of 25,000 hectares per annum in Ghana and the GOG has mounted an active agroforestry effort to counteract this trend.

In addition, there is a nascent timber industry, which is primarily private companies exporting no more than a dozen of the large number of species of trees in the forest. The timber-logging industry is governed by forestry laws. The USAID TIP Program will provide technical assistance for furniture production.

USAID/Ghana is carrying out a special Tropical Forestry Environmental Assessment (TFEA) in cooperation with the Ghana Export Promotion Council (GEPC) and other donors (notably the World Bank and the U.K. ODA). Conservation International, a U.S. organization participating in the USAID Debt for Development Project, will help to delineate, define, and ensure impact mitigation of any Primary Tropical Forests that may be affected by the TIP Program over the long term. The TFEA and the Environmental Impact Review (EIR) should be required reading for personnel who are assigned work in the forestry/furniture sector.

Impact Mitigation

Land-use patterns in areas where new plantations may be started must be monitored carefully. Training and deployment of agroforestry extension agents should be encouraged, especially in the pineapple and yam-growing areas. The GOG should establish and enforce stringent conservation measures and proper forest management, especially in the case of primary tropical forests.

The forestry regulations stipulate that new trees be planted to replace those felled and that immature trees not be felled. The laws also prohibit the export in round logs of all the prime timber species harvested. This indirectly encourages local processing of timber and reduces the volume of wood harvested for export.

The TIP program will be providing technical assistance in the forestry subsector for the furniture industry. The Mission should work with the GOG to support techniques that encourage an ecologically sound approach, such as the use of

composite material (e.g., chip board), recycled wood substitutes (pressed wood from sawdust), or veneers, to reduce the total cutting; promote the use of nonrare species; and substitute species or encourage the furniture industry to start its own wood plantations.

To achieve the above, the USAID/Ghana TIP Program will incorporate environmental concerns into the *Monitoring and Evaluation Plan (MEP).* A short, concise baseline study will be carried out in each of the four sectors. These are referred to as *Environmental Impact Reviews.*. These will identify the responsible GOG institutions that will provide the data used to monitor performance in the environmental sector.

Conclusion

The four EIRs have been carried out, producing several alternative approaches in each sector. Although it is still too early to tell whether the above approach will succeed, this case study indicates that it is possible to balance the needs of environment and development. We can provide investment incentives without encouraging or subsidizing industrial pollution and environmental degradation.

Robert McColaugh: "Ecotourism"

Botswana's Department of Wildlife is involved in an extension and outreach program to educate the people on the value of tourism, conservation, and sound management of the flora and fauna.

The Department is trying to educate the communities about *consumptive* (eating and harvesting for export) and *nonconsumptive* (hunting and photography) uses of animals. *Nonconsumptive use is referred to as ecotourism.*

People seeking to lease or rent land from the tribal community or from the Department must have an approved land-use plan.

Southern Africa is a great location for the development of tourism because of the presence of infrastructure and services, especially in the Republic of South Africa (RSA). Access and equity for Black South Africans is absent, however, and there is a need to improve that access and ensure more equitable sharing in the benefits brought by tourism, especially in the RSA.

Botswana imports 80 percent of the food consumed by its people, but it is also the largest exporter of chilled beef to the EEC in Sub-Saharan Africa. The railroad (408 miles long) is the major transport link with the Republic of South Africa and Zimbabwe.

Only 5 percent of the land in Botswana is arable. National parks and reserves for 17 percent of the land, and wildlife management areas, 23 percent; there are controlled hunting areas managed by the local communities. Five percent of the land is free-hold; 33 percent is state-owned; and the remainder is owned by tribal groups.

Mary Picard: "An Overview of Sustainability"

Access to resources and opportunities for management of resources is limited for women in most parts of Sub-Saharan Africa. Therefore, the effect of reform on existing patterns of ownership, access, and management of resources and opportunities, especially in terms of gender, ethnicity, and class, should be considered.

Women tend to be most active in the informal sector and in the domestic economy because of their relative lack of access to resources, including land, labor, capital, information, education and training.

There are links between increases in productivity and population growth rates, especially by releasing children from the labor force. Integrate social soundness analysis into the programs and projects so that the actual project beneficiaries participate in the analysis and evaluations.

Illustrative questions to ask during impact assessments which relate to gender analysis:

- *Managing resources:*
  - How is it anticipated that natural resource management practices will change as a result of agribusiness and agricultural marketing development?
- *Access to resources:*
  - How will new economic opportunities affect people's access to resources: land, labor, capital, technology?
  - What factors may aggravate or mitigate existing disparities in regional economic benefits, class- or ethnic-based benefits, rural- or urban-based benefits?
- *People-level impacts:*
  - How can popular participation (democracy and governance) be enhanced? Through an NGO/PVO initiative? Through a Women in Development (WID) initiative?
- *How to address the issues in programs and projects:*
  - Use an integrated analytical approach (apart from special WID consideration in the Social Soundness analysis). Use rapid rural appraisal techniques.
  - Use an integrated implementation approach with participatory research and participatory technology development.

Don Drga: "Results of Session 1 Discussion"

Potential Environmental Impact of NTEs

1. Deforestation and land-use change in steep-sloped or unsuitable areas.
2. Soil erosion.
3. Inappropriate use of pesticides, which can cause:
   - Residues in foods leading to product rejections;
   - Contamination of water, soils, and plants;
   - Human health damage; and
   - Pesticide resistance among insects.
4. Effects of fertilizer run-off on water supplies.
5. Impacts on agroecological diversity.

Socioeconomic Impact of NTEs

1. Who produces NTEs? Large and small farmers, but can small farmers compete?
2. Other beneficiaries: marketers, exporters, brokers, agrochemical enterprises, but are the benefits spread equitably?
3. Jobs generated for women and men:
   - Is it seasonal work?
   - Is it secure/safe?
   - Are wages fair?
   - More potential of rural industries?

Responses and Actions Suggested

1. Policy, institutional, and legal reforms:
   - Policy dialogue;
   - Legislative change and enforcement; and
   - Institutional strengthening for sustainability.
2. Mitigation measures:
   - Training and education (especially integrated pest management);
   - Extension services improvements; and
   - NTEs agroprocessing capacity improvements.

3. Monitoring capacities: improve.

4. Take actions to address social concerns.

5. Do more research on impacts.

Success Stories

1. Radville Farms: The Gambia. Nucleus farm and growers.

2. Paper recycling: Swaziland and Kenya. This cut the waste of paper in offices, cut deforestation losses, and delivered paper to schools.

3. Capturing economic benefits at the local level: Ghana for NTEs, and Botswana for ecotourism.

4. Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) Program in Zimbabwe: Returns to the community.

Recommendations

1. Integrate all tourist activities in regions and countries.

2. Identify and share successful practices in ecotourism.

3. Improve on ways to identify markets and get produce to those markets.

4. Criteria for meeting market needs have to be understood by producers.

5. Look at project design to make sure impacts on the environment are addressed.

6. Continue to improve methods to capture the socioeconomic benefit at the local level, especially the environmental benefits at the local level.

7. Gender bias issue: examine access to resources and economic opportunities for women.

Session 2: TOOLS AND METHODOLOGIES FOR AGRICULTURAL MARKETING AND AGRIBUSINESS ANALYSIS AND DESIGN

Purpose of the Session:

To present the Africa Bureau Strategic Framework for Marketing to new Africa Bureau Mission ADOs and solicit the comments of other ADOs regarding its application and utility.

Moderator: Ernie Gibson, AFR/ARTS/FARA AMA Unit Leader

Presentations: Thomas J. Herlehy, AFR/ARTS/FARA/AMA: "A Strategic Framework for Promoting Agricultural Marketing and Agribusiness Development in Sub-Saharan Africa"

Jerry LaGra, Inter-American Institute for Cooperation on Agriculture: "The Commodity Systems Assessment Methodology (CSAM)"

Thomas J. Herlehy: "A Strategic Framework for Promoting Agricultural Marketing and Agribusiness Development in Sub-Saharan Africa"

Improving agricultural sector production and productivity will generate broad-based economic growth. To do so, we need to answer two key questions:

- How can we increase production and/or productivity?
- How can we sustain increases in production and/or productivity?

Previously, USAID—and African Governments as well as the other donors—focused agricultural sector efforts on getting answers to the first question: *How can we increase production?*

The approach taken to answer that question was basically a *supply*-oriented approach. That is, by improving existing farming methods and systems, governments and donors hoped to increase the effectiveness of existing systems of production, and, by introducing new and better farming methods and systems, to increase the efficiency of the agricultural sector.

The proven results are that *production can be increased, and agricultural factor productivity can be improved.* However, insufficient attention has been given to an equally important question: What will be done with the surplus being produced? Or how can we sustain increases in production and productivity?

There has been a relative lack of attention to markets, marketing systems, and the role of agribusiness in those systems.

- What happens to the commodities being produced?
- Where is the demand? Where are the markets?

The Problem

Sub-Saharan Africa is the only area in the developing world in which *agricultural production per capita* declined between 1965 and 1985 and the only area of the developing world that has *lost its share of international trade in many important commodities.*

The Cause of the Problem

Exogenous Factors

- Poor weather (late 1970s, early 1980s).
- Rising world oil prices.
- Rising real interest rates in world financial markets.

- A net decline in total donor assistance.
- Falling international prices for commodity products.

Prices

While world market prices for sub-Saharan African primary products have fallen, especially since 1980, they have fallen only by half as much as the world average for all agricultural commodities. *Prices of major African exports, such as tea and cocoa, have stayed relatively high, while prices for cereals have tumbled at a much faster pace.*

Market Share

Sub-Saharan Africa has lost its share of international markets for most commodities in which it has a comparative advantage. Africa's world market share of *oilseeds, coffee, tea, cocoa, bananas, and cotton* have fallen sharply since 1965. For example, Ghana's share of the world cocoa trade has fallen from 30 percent in 1967 to only 12 percent in 1985. Ghana has fallen from first to third place in the world cocoa trade.

While some of this market share was taken by Côte d'Ivoire, which has emerged as the world's leading cocoa exporter, Brazil and Malaysia have taken significant shares of the world trade. Indeed, Brazil is now the world's second leading exporter of cocoa, and Malaysia has surpassed Nigeria to become the world's fourth leading exporter of cocoa, poised to overtake Ghana as the third leading exporter.

Since 1970, Africa's *export volumes* have been roughly static, while those of other developing countries have more than trebled.

If sub-Saharan Africa had merely maintained its *market share of world trade* in commodities for which it has a comparative advantage, the foreign exchange earnings would be $4 billion higher than they are today (equivalent to the total annual debt bill facing the subcontinent).

While *exogenous* factors exacerbated the crisis in the agricultural sector, *the primary causes were indigenous*, especially unsound government policies and lack of technological innovation in agricultural enterprises.

Indigenous Factors

- Unsound government policies (foreign exchange rates, subsidies, price controls, other restrictive practices).
- A dramatic increase in the public sector and its role in the economy, especially in agricultural marketing.
- A rise in the amount of borrowing by the public sector to finance investment activities.
- Unsound new government investments and lack of maintenance and rehabilitation of existing infrastructure and institutions.

Solution to the Problem

The USAID Africa Bureau has developed a new approach to the problems, which involves more emphasis on an analysis of how the agricultural sector operates, especially *the links between the agricultural sector and the rest of the economy.*

Where is the strongest link?

In agricultural marketing systems.

Marketing inefficiencies are enormous in sub-Saharan Africa, especially when compared to other specific problems. Between the farm gate and the point of consumption, marketing inefficiencies raise costs and make commodities more expensive. For example, in Ghana, transport costs average about 70 percent of the total retail commodity price. As a result, less money goes to the producer (farm-gate prices); less capital accumulates in rural areas, and there is less investment ot raise productivity among rural households. If donors or governments had only one option for development expenditures, an investment to improve the efficiency of agricultural marketing systems would have broader beneficial impact on the ecnoomy as a whole than any other single investment.

Definition: Agricultural marketing is a process whereby inputs are delivered to farmers—outputs are collected, transported, stored, and transformed—before being delivered to consumers.

It is a *demand-driven process.*

Our efforts should focus on the proven or potential demand for specific commodities and produce them to meet that demand. The marketing system transmits the information about what is in demand, how to produce it, and where to sell it.

Four Concepts Underlie the Approach

1. *Comparative Advantage:* Emphasis should be given to the production and marketing of those commodities for which the country has a comparative advantage so that foreign exchange earnings may be increased.

2. *Competition:* Competitive markets tend to be more efficient than monopolistic markets in allocating and using scarce resources. Therefore, competition in marketing activities should be emphasized.

3. *Value-Added:* Emphasis should be given to activities that add value to what is produced on the farm. This involves more attention to marketing activities, because marketing adds value to what is produced through:

   – space (transportation),
   – time (storage), and
   – transformation (packaging, processing, etc.).

4. *Stages of Market Development:* An illustrative model of market development has been put forward as an example of how marketing systems *evolve.* Markets tend to be very *dynamic.* Therefore, they are subject to almost constant change. Not all change is necessarily progressive; some is regressive. Thus, this model should be used with caution. However, it does provide some guidance for analysts, who may find it useful in trying to describe the problems and opportunities in a particular commodity system.

The Three Elements of an Agricultural Marketing System

There are three basic elements in an agricultural marketing system which can vary across commodity subsystems.

1. *Policies and regulations and their administration* (macroeconomic and sectoral):

   – Pricing policies (foreign exchange rates);
   – Fiscal and monetary policies (tax policies, interest rate policies, subsidy policies);
   – Trade policies; and
   – Regulations and their administration (especially the legal system, contract law and its enforcement).

2. *Infrastructure and institutions:*

   – Hard Infrastructure:
     Roads, railroads, river transport;
     Market centers, storage centers;
     Airport and seaport cargo facilities;
     Electric and water power facilities; and
     Sorting, grading, and processing facilities.
   – Soft Infrastructure:
     Financial services;
     Market information services;
     Telecommunications services;
     Postal services; and
     Radio and television services.

– Institutions providing such services:
  Banks and other financial institutions;
  Export promotion councils and Chambers of Commerce;
  Government ministries;
  Universities and research institutes, etc.

3. *The market participants themselves:*

– Agribusinesses (the private sector), and
– Technical and managerial skills to get the job done.

All these elements, in combination with each other, provide *an enabling environment* for marketing activities to occur and for investment in such activities to take place.

This means that there must be adequate *incentives* for the private sector. The private sector must feel confident and secure enough in the political regime of the country that it is willing to take the risks to make the investments that are needed to increase agricultural productivity through more *efficient* agricultural marketing systems.

The Africa Bureau takes *a balanced yet flexible approach* to market system development, with an emphasis on increasing the role of private agribusinesses in a competitive market environment.

To do this, the Bureau recommends:

1. Supporting policy and regulatory reform;

2. Supporting the transparent administration (enforcement) of simple but fair rules and regulations;

3. Devoting investment funds to the rehabilitation and maintenance of the existing hard infrastructure for marketing systems;

4. Encouraging the development of soft infrastructure, especially services to improve marketing activities, with particular emphasis on market information and financial services; and

5. Providing training to the market participants themselves, including government policy makers and administrators, as well as to private agribusiness owners and their staff in both technical (operational and financial) and managerial skills.

Jerry LaGra: "The Commodity Systems Assessment Methodology (CSAM)"

Why Do We Need a Commodity Systems Assessment Methodology?

Food systems in any country can be very complex and confusing, for even the well informed. It is rare that any one person will understand *all the intricacies of the planning, production, postharvest handling, and marketing of any one commodity.*

Throughout the Third World, large numbers of agricultural development projects are executed at great cost without producing the desired results.

Many projects fail because they take a piece-

The CSAM is a 115-page manual with 100 pages of annexes, which contains a step-by-step methodology for describing and analyzing a commodity system; provides guidelines and instruments for the identification of priority problems and the formulation of project profiles; and contains useful formats, questionnaires, and graphics in the annex. The CASM manual was developed as a joint effort of the Post-Harvest Institute for Perishables (PIP), the Inter-American Institute for Cooperation on Agriculture (IICA), and the ASEAN Food Handling Bureau. The manual is authored by Jerry LaGra, IICA Rural Development and Marketing specialist.

meal approach, concentrating on what are considered to be high-priority areas (such as institutional building, agrarian reform, irrigation systems, agricultural extension, credit, farm input supply, infrastructure, and market information systems).

In some cases, *projects fail because they are executed at the wrong time or simply because they only attack one or a few constraints in a total system plagued with constraints.*

The CSAM Unique Approach

The traditional sector appraisal or analysis looks at the whole agricultural sector and identifies its major constraints to a greater or lesser degree, depending on the availability of resources. *The end result is project ideas that focus on subject areas that are not product-specific* (e.g., credit for a variety of crops, irrigation systems where many different crops may be grown, general training for extension officers).

Because the "solutions" do not cover the whole commodity system, it is common to find situations such as a successful increase in production without the markets in which to sell the surplus or marketing being promoted without the necessary investments in marketing infrastructure. The end result is often project failure and loss of scarce resources.

Using the CSAM approach, one particular commodity (be it fruit, vegetables, roots, grains, animal products, fish, etc.) *is studied in detail—from the point of planning production to final retail.* The end result is a detailed understanding of the total commodity system and the identification of priority problems throughout the system.

Once the problems become clear, it is relatively easy to identify project ideas and design the necessary solutions.

The resulting solutions tend to be much more effective because they include an active role for the intended beneficiaries and the actions are implemented on a more timely basis.

The Analysis of a CommoditySystem

The analysis of a commodity system is carried out by an interdisciplinary (and perhaps interinstitutional) team of national professionals from both the private and public sectors. Depending on availability of human and financial resources it may be carried out in a period as short as one week or as long as several months. Two to four weeks is considered ideal.

The methodology is adaptable to local needs and may include review of secondary literature, classroom lectures, workshops, plenary sessions, on-farm visits, and field work by one or more interdisciplinary teams.

The methodology divides the food system into 26 components and describes the type of information that should be collected on each component.

During application of the methodology, work teams apply techniques that have been developed and validated for the gathering and organization of information on institutional and environmental aspects, (preproduction) agronomy, harvest, postharvest handling, agroprocessing and marketing.

The Identification and Formulation of Projects

The CSAM includes tested methodologies for:

- problem identification (brain storming);
- cause-effect analysis (problems tree);
- definition of objectives (objectives tree); and
- formulation of project ideas into project profiles which can then be inserted into the logical framework matrix.

Expected Outputs

The CSAM has been field tested in the Caribbean, Malaysia, and Nepal and has produced very favorable results. In addition to the identification and formulation of sound development projects by the working groups, *the methodology often leads to:*

- improved communication and coordination among professionals;
- improved coordination between institutions;
- improvement of the information base on specific commodities; and
- hands-on training for agricultural professionals, farmers, and intermediaries.

Why Projects Fail

People-Related Causes

- Nonparticipation of intended beneficiaries (or executors) in project design and implementation. *They have no real commitment to the project.*
- Poor planning and/or decision making with respect to project design, timing, management, monitoring, and follow up.
- Pressure from funding agencies (institutional agendas).
- Ideas introduced from outside by consultants, international specialists, or brainwashed nationals.
- Inauguration syndrome (ribbon cutting).
- Institutional bureaucracies' inability to take innovative approaches.
- Competition (jealousies) between technicians or institutions to manage or implement the project.
- Dishonesty.
- Failure to phase in, phase out properly.
- Wrong attitude of participants: beneficiaries, technicians, decision makers.

Information-Related Causes

- Overreliance on existing reports and documents, which may be outdated or simply wrong.
- Too few disciplines involved in project design.
- Information biased toward one part of the total system.
- Insufficient information available to take a holistic approach (preproduction, production, harvest, postharvest, and all marketing functions).
- Inadequate information to evaluate sustainability criteria.

Project Sustainability Criteria

The greater the number of "yes" answers to the following questions, the more likely the project is to be sustainable.

Social Criteria

- Did intended beneficiaries and project executors participate in project design and do they have a role to play in project implementation?
- Do all key participants support the project?
- Have any persons/institutions who may be affected negatively by the project been identified and appropriate actions taken to redress or reduce any potential negative impacts?
- Does the project create rural employment opportunities and/or provide social amenities?

Economic Criterion

- Will the project increase income for targeted group?

Political and Institutional Criteria

- Does the project have the appropriate institutional support?
- Is project supported by relevant policies?

Environmental Criterion

- Does the project contribute to maintaining or improving the environment (is it environmentally friendly)?

Technological Criteria

- Is the necessary technology available?
- Is the proposed technology appropriate to conditions?

The answers to these questions can be obtained by using a commodity systems approach, the CSAM approach. For example, an entrepreneur who is wondering if he can make a satisfactory net profit growing hot peppers will need to answer many questions.

These questions should also be asked by USAID project design officers before embarking on an agricultural sector project.

The following are the types of questions that the CSAM approach would help identify and answer:

1. If I grow hot peppers, will I be able to sell the crop?
2. Where are the markets?
3. What tariff and nontariff barriers exist (quarantine, transport, others)?
4. What are the market characteristics and requirements?
5. What range of unit delivered price can be expected throughout the season?
6. Who are my competitors (national and international) and how well can I compete with them?
7. What are the best conditions for growing hot peppers?
8. When is the best time to plant?
9. What varieties of hot peppers are recommended?
10. How should I produce planting material?
11. How can I obtain the recommended planting material?
12. When should I start preparing the seedlings?
13. How should I prepare the seed bed?
14. When should seedlings be transplanted to the field?
15. How should I prepare seedlings for transplanting?
16. What spacing is required for hot peppers?
17. What care is required in the field?
18. How can weeds be controlled effectively?
19. What fertilizer should be applied?
20. How often should fertilizer be applied?
21. What is the recommended rate of each application of fertilizer?
22. What are the most common pests common to hot peppers?
23. How can these pests be controlled?
24. What are the most common diseases of hot peppers?
25. How can these diseases be prevented and controlled?
26. When is the best time to harvest hot peppers?
27. How should they be harvested?
28. How should they be packed/handled/stored?
29. How should hot peppers be transported to the market?
30. What is the expected yield of hot peppers?
31. What percentage of yield will be of market quality?
32. What options exist for second-quality product, at what price?
33. What are the production/harvest costs?
34. What are the postharvest/marketing costs?
35. What comparative advantages do we have in production and marketing?
36. What is minimum economic size unit?
37. What technical and financial resources does this imply?
38. What volume of exports is required to break even?
39. What level of losses can I absorb?
40. What will happen to profitability if volume and prices are lower then projected?

Session 3: PRESENTATION OF BREAK-OUT SESSIONS DISCUSSIONS

Purpose of the Session:

To share information on the design and implementation of sound agricultural marketing and agribusiness development projects and programs using the STRATEGIC FRAMEWORK and the CSAM approach.

Moderator: Thomas J. Herlehy, AFR/ARTS/FARA/AMA

John Mitchell (ADO, USAID/Niger): Results from Group 1

Group 1: What design issues are raised by A Strategic Framework *and the commodity systems (CSAM) approach?*

The *Strategic Framework* provides us with a process-oriented approach to market development, not a task-oriented approach.

Marketing is a process and using the *Strategic Framework* requires that *we be more process oriented*, especially if we take a commodity systems approach—whether the commodity is a nontraditional agricultural export or an important domestic food commodity.

Using the commodity systems approach, we look at the whole marketing chain and *involve all marketing participants in the process of market analysis, project design, implementation, management, and adjustment (continuous flexibility).*

We can use the *Strategic Framework* to *let people find their own solutions to marketing commodity system problems and opportunities.*

We have finite resources, both funding and personnel (staff), but by using the *Strategic Framework* with market participants, we can identify and rank problems and opportunities and use our staff and resources to address key constraints and help men and women agribusiness entrepreneurs take advantage of market opportunities.

Darrell McIntyre (ADO, USAID/ Mozambique): Results from Group 2

Group 2: What implementation and management issues are raised by these approaches?

We should be sure that our approach and analysis:

- analyzes the cost of any new technology,
- determines the existence of market demand,
- examines the relationship between the new project and existing portfolio, and
- determines how we can complement existing program goals.

We should try to use the *Strategic Framework* to encourage Mission Directors to include marketing support in our program as specific program goals or as "targets of opportunity."

We are using *roundtables to have discussions* such as those suggested by the CSAM model (e.g., Burundi and Guinea, both in 1992).

The CSAM indicates the importance of relationships between marketing agents, especially between the government and the host-country private-sector agribusinesses.

USAID ADOs can help facilitate the process of bringing the host country public and private sector together.

We need to calculate:

- Export/regional marketing impact;
- Number of jobs created;
- Income generated; and
- Foreign exchange earnings rise and diversification (who is earning it).

We should keep track of our successes:

- Starting small in our approaches;
- Being sure that our projects have sustainability when we end our support;
- Being willing to take risks with innovative approaches; and
- Using regional and/or central funds for experimental approaches so as not to take from scarce Mission resources.

We need to go out to our clients and:

- Ask and answer marketing questions;
- Build approaches into our sector strategy, then start the project design;
- Involve local institutions;
- Assess and understand the local political situation;
- Know the USAID/W and Mission politics and potential reaction to our proposals; and
- Be able to cite the local benefits.

We need to be able to "massage" what we (Mission and host country participants) think the country needs with what USAID/W is seeking for that country.

We should build *networks in the host country*, especially by using USAID trainees as resources to build public- and private-sector consensus and coalitions.

We need to know the *mindset of the private sector*. Adding value to the products will also add profit.

We need to reassure the government that moving away from central control over the economy will not decrease the *amount* of economic activity. Changing the rules and changing the system of contacts will involve a different set of risks to all involved in the current way of doing things. There must be local political will to move this way.

USAID Missions could help move the country by calculating the tax benefits to be gained from moving from central control to a more laissez faire approach. USAID Missions could document the *incentives* gained by the Government in terms of:

- Foreign exchange benefits,
- Increased salaries / new tax bases and codes,
- Retraining of the Civil Service,
- Trade coming Back to the formal sector, and
- Increased private investments.

USAID Mission ADOs need more *training* in the approaches suggested today before we can use them effectively. There are different mechanisms for promoting private trade and investment and we need training in them.

Recommendations

1. *Any document (e.g., CPSP or PAAD or PP) coming into Washington must have a sectoral approach.* The "private sector" is *not* a sector in the traditional sense of the term; rather, a sector is, for example, agriculture, education, health, etc. Program design must intimately involve ADOs.

2. *Mission ADOs do not want to be restricted from being involved in "private sector" issues, programs, or projects.* Clarify which skills are needed for ADOs to do NPA and look at funding more training, more conferences, and such for ADOs.

3. *Clarify or redefine what is meant by agribusiness and the "private sector," in both USAID/W and the field.* For example, "agriculture" and "agricultural marketing or agribusiness development" do not get mentioned in the Mozambique Mission strategy, yet a large and significant program is supporting liberalization of agricultural marketing there.

4. *Utilize the skills of ADOs.* We know the commodities and the related technology issues very well, including marketing requirements, and we can help judge the feasibility of production, marketing projects, or proposals.

5. *Improve the coordination of information flow from Missions to USAID/W and from USAID/W to the field.* There are poor communications now. For example, there is no one source from which a field Mission can obtain all useful information on what kinds of resources are available to assist with agricultural marketing and agribusiness promotion.

John McMahon (ADO, USAID/Cameroon): Results from Group 3

Group 3: What are useful (illustrative) monitoring and evaluation indicators of successful impact when using such approaches for a program and/or project?

The group poses two questions for consideration:

- How much money do we want to spend on collecting information for the indicators?
- How accurate are host-country government official reports or even private-sector market reports? Can we use them as a reliable basis to measure impact?

We do not have answers to these questions, but we need to be aware of these issues as we develop our monitoring and evaluation plans.

We suggest the following as qualitative and quantitative indicators for agricultural marketing programs and projects that use a commodity-specific focus:

Qualitative Indicators

- Timeliness of input delivery;
- Timeliness of output delivery;
- Evidence of increased market integration and coordination; and
- Evidence of greater competition.

Quantitative Indicators

- Income changes among market participants;
- Marketing costs structure changes:
  - in transport,
  - in storage,
  - in other transactions;
- Consumer price changes;
- Production cost changes;
- Farm-gate price changes;
- Changes in number of market reports and their applied use by marketing participants (from policy makers to agribusiness owners);
- Number of agribusinesses in an activity (e.g., input delivery, output collection and delivery, processing, etc.);
- Amount of and return on private agribusiness investment;
- Increased share (proportion) of marketing activities by private agribusiness and private entrepreneurs;
- Foreign exchange earnings generated through agricultural exports and/or foreign exchange savings generated by import substitution through greater domestic marketing and processing of foodstuffs.
- Changes in the volume and value of credit going to the agricultural sector, especially for agricultural marketing (buying, selling, storage, investment in facilities and infrastructure, processing, and export).

Session 4: AGRICULTURAL MARKETING AND AGRIBUSINESS INDICATORS AND MONITORING AND EVALUATION PLANS

Purpose of the Session:

To respond to Mission ADO requests for guidance in selecting sound impact indicators for agricultural marketing and agribusiness development programs and projects.

Moderator: Dennis Panther, USAID/Togo

Presentations: John Holtzman, Charlie Stathacos, and Carol Adoum, Abt Associates: "Illustrative Indicators"
Mary Picard, AFR/ONI: "Gender Issues for Indicators"
David Martella, ADO, REDSO/ESA: "ADO Issues on Indicators"

John Holtzman, Charlie Stathacos, and Carol Adoum: "Monitoring and Evaluation of the Impact of Agribusiness and Agricultural Marketing Initiatives"

Congress requires that USAID measure the impact of our investments in development. Therefore, we need indicators to help us monitor and evaluate the progress of our projects and programs.

Indicators must be *practical*: we should measure what is most important in a project or program and be cost-effective in the collection of the data required for that measurement.

Indicators must be *targeted*: we need to measure both quantity and quality and account for change that is *attributable to the project over time.*

1. Measuring Performance Effectively

Indicators are often used that involve people and their actions that are beyond the scope of the project or program. For example, for the strategic objective of *increasing private-sector participation in the economy*, an indicator could be:

- Private-sector investment in the economy increases from 75 billion CFA francs in 1989 to 130 billion CFA francs in 1995; and
- X percent of new jobs or 100,000 new jobs are created in agribusiness, 30 percent of which have gone to women.

How are we going to be able to measure these indicators? And how can we attribute any changes in these indicators solely to the USAID project or program?

What about the collective impact of many donor efforts, such as the World Bank and other donors, in developing agribusinesses or improving policies that affect agribusiness?

2. Measuring Performance Practically

Often the indicators that have been developed require massive amounts of *baseline data gathering.* These data must be gathered *prior to the beginning of the project* and monitored and collected throughout the life of project.

Illustrative indicators include:

- Higher producer prices paid to farmers,
- Lower retail prices for consumers, and
- Lower marketing costs for marketing agents.

In Africa, it is very difficult for us or the Government to collect this kind of baseline or sectoral data from any reliable source.

Primary data of this kind involve extensive producer- and consumer-level surveys, which can be very time-consuming and expensive for Missions or host-country governments.

Another practical issue is knowing how to measure certain kinds of impact. For example, in attempting to evaluate a market information systems project, ideally we should know that traders are making better decisions based on their access to better information. But how can this be measured? Perhaps a sound indicator would simply be whether traders *believe the information is of value to them.*

3. Process versus Impact Indicators

These are two kinds of indicators that are used, but we need to keep in mind that they have two different objectives.

Process indicators are more valuable at the early levels of the objective tree, when we are not measuring impact but are measuring the delivery of services and creation of conditions that will foster or lead to certain outcomes.

Impact indicators are more valuable at later stages of project implementation, when we want to test whether the conditions that we have put into place are having the desired results.

In other words:

- *Process indicators measure the extent to which an activity has been implemented*; whereas
- *Impact indicators measure the success of the activity and/or the degree to which the overall objective(s) has been achieved.*

Examples of both kinds of indicators are:

- *Process Indicators*:
  - 200 small-scale entrepreneurs trained by year 2;
  - 50 new businesses receiving loans by year 3;
  - 10 regulatory steps involved in exporting a commodity reduced to just 2 steps in year 1.
- *Impact Indicators*:
  - Storage costs for grain decrease from X CFA francs per load to only Y CFA francs per load or less;
  - Return on investments in marketing or agribusiness enterprises increases by 10 percent;
  - Employment in the given commodity-specific (e.g., horticultural) project (or processing sector) increases by 30 percent.

4. Flexibility in Determining Agribusiness Indicators

USAID project officers and evaluators should be willing to use indicators in a *flexible* manner. As conditions change over time, what may have seemed like a reasonable outcome under one scenario may no longer be valid as project implementation has gone forward.

Agriculture, and by extension agribusiness and marketing activities, is especially prone to being influenced and distorted by factors or events beyond the control of program or project planners and managers. For example, weather conditions and world commodity prices are just two outside factors that can influence achievement of benchmarks and objectives.

Flexibility is also needed because the project itself may not have had a direct impact on the data being generated. For example, a sudden *increase in per unit marketing costs* may be the result of an increase in fuel costs that were not related to the project itself!

Finally, attention must be paid to the difference between *short- and long-term impacts.* In the long run, efficient markets will mean shrinking marketing margins and higher producer prices to farmers, while retail prices to consumers become relatively lower, too. However, in the short term, prices for producers and consumers may be more volatile and subject to sudden change. When measuring impact, we should keep such factors in mind.

5. Indicators and the Objective Tree

There are five levels in a performance matrix. Using the example of an Agricultural Sector Strategic Objective—"To achieve sustainable increases in agricultural productivity"—we can make the following observations.

Level I

These are the actions that establish conditions, or, in the log-frame terminology, these are the inputs or activities.

This is the level at which *process indicators* are most useful. The inputs are projected activities or project services that will lead to impacts and conditions later.

The activities are things such as conducting training programs, changing trade policies, investing in telecommunications.

In designing the project that calls for these activities, it should be established that they will lead to the achievement of objectives and outcomes mentioned above.

Level II

The activities undertaken in Level I establish the *conditions* that we measure in Level II. The presence or absence of these conditions will presumably tell us whether the Level III objectives will be achieved.

If we follow the *Strategic Framework* model, conditions to contribute to increased efficiency should show reduced price distortions and more efficient markets, improved market infrastructure, strengthened market participants, and so on. How do we measure the presence or absence of these conditions?

These will tend to be *impact indicators.*

Levels III

It is preferable to have *impact indicators* as opposed to process indicators. Level III particularly is probably the most appropriate point at which USAID can assess impact at a reasonable cost, and hope to be able to attribute cause and effect of the project.

Level IV

Level IV indicators are the expected economic outcomes resulting from achieving market efficiency. Monitoring the impact of projects or programs at Level IV is difficult in the absence of baseline data and good secondary data.

One option for monitoring is to build in yearly or periodic follow-up surveys of a smaller sample of the large baseline production or consumption/ income survey respondents. They must be sure to represent different socioeconomic groups and production scales and technologies.

Level V

Level V, the Agricultural Sector Strategic Objective, is obviously the most difficult to attempt to link to USAID projects. Much of the available data that governments and other donors gather are in response to agricultural sector adjustment loans, with emphasis on broader policy impact, so *little work has been done on developing sector-level measures of increased agricultural productivity.*

At the sector level, *entrepreneurs may be reluctant to provide detailed financial information* to governments because of tax increases or harassment. These indicators, therefore, are problematic, and the major problem with them is that it is impossible to attribute changes to USAID projects alone.

6. Choosing Indicators

The cost of gathering data is always an issue. Indicators that depend on large baseline studies where sensitive information must also be gathered and extensive, sophisticated analyses done, may not be feasible.

Missions should do *an inventory of what kinds of accurate data banks already exist in country.*

A truly unobtrusive but interesting indication of the usefulness of a market information program that I heard about is this: A government had to reduce funding for the radio programs that were disseminating the market information. However, the radio station decided to continue broadcasting this program information because it knew the program was highly popular and advertisers were falling over themselves to purchase advertising space during this program.

The three most important attributes of indicators should be:

- They refer directly to the activities, conditions, or objectives that we are trying to measure.
- A few key indicators are chosen at the beginning of the project design, and measurements are taken immediately so that a base for comparing data over time is established.
- Simple indicators are used; these are more cost-effective and may be more accurate. (Complex modeling exercises with multiple variables will be costly and take a long time.)

One way to get around the bias inherent in using key informants who may, over time, become aware of what answers they are "expected" to give, is to *use unobtrusive or proxy indicators.* These indicators also serve in cases where getting primary data is difficult and costly. A proxy indicator for development impact could be changes in the number of bicycles or cars in the community, the number of radios in rural households, an increase in corrugated tin roofs, etc.

Using the market information systems, it would be very difficult to find out whether traders are using the market information to make better decisions. Therefore, a proxy indicator should be whether they *believe the information is of value to them* or whether they report that the *market information report is one of the radio shows they listen to regularly.*

Mary Picard: "An Analysis of Gender Reporting in the Mission APIs"

This analysis covered a review of the 17 USAID priority countries that submitted APIs in FY 1992: Burundi, Cameroon, the Gambia, Ghana, Guinea-Bissau, Kenya, Lesotho, Malawi, Mali, Mozambique, Niger, Rwanda, Senegal, Swaziland, Tanzania, Togo, and Uganda.

Gender reporting is defined as gender disaggregation at the indicator, subtarget, target, or strategic objective levels in the logframe or mention of gender issues in the narrative of the API.

This analysis is not reflective of Mission activities as a whole or of the entire sector, project level, or regional programs that fall outside the purview of the API.

Agriculture / Natural Resources Management

Fifteen Missions had strategic objectives on agriculture and NRMS. Of the 15, *only three Missions had gender-disaggregated indicators,* and two Missions referred to gender issues in the API narrative section.

Private-Sector and/or Enterprise Development

Fifteen Missions had strategic objectives related to the private sector. Of the 15, *nine Missions had some gender disaggregation,* mostly in ownership or management of SMEs.

Export Sector

Eight Missions had strategic objectives relating to the export sector. *Not even one Mission* made reference to gender at the strategic objective, indicator, or target levels. (USAID Missions in Ghana, Kenya, Togo, and Uganda are involved in nontraditional exports.) One Mission, USAID/Uganda, did refer to gender in the API text pertaining to training local extension agents—men and women—to work with the vanilla growers' association and other vanilla farmers.

General Conclusions

Based strictly on API reporting, this analysis shows that in applying the gender variable, females are underreported or unevenly considered in the productive and economic sectors, while males are not proportionally incorporated into the social service sectors.

Recommendations

1. *Export-sector monitoring and evaluation:* A good example of what can be done in this area may be found in the USAID/Ghana Trade and Investment Promotion (TIP) Program. The TIP program has a monitoring and evaluation system that includes special activities to track gender-differentiated impacts. These activities encompass employment and income surveys and two special studies: sector studies in priority sectors and a cross-border trade study. The latter will develop a gender-disaggregated baseline for enterprises and activities in the chain linking producer and exporter and potential income and employment impacts resulting from cross-border trade.

2. *Gender-disaggregated indicators:* Process or intermediate indicators, such as number of participants in training or number of farmers adopting technologies, can easily be gender disaggregated.

3. *Gender issues by sector:* Female participation in agriculture and the private sector deserve greater attention in the narrative section of the API and in country reporting plans and programs generally. Likewise, it should be demonstrated that health and family planning are targeting males as well as females in the social-service sector.

4. *Illustrative gender-disaggregated objectives, targets, and indicators:*

   – Improve marketing arrangements through cooperatives.
   – Increase private-sector employment in the export-processing sector.
   – Increase access to financial services.
   – Improve outreach to ensure the acceptability of improved technologies.
   – Create and reinforce a supportive environment for private-sector growth (e.g. remove barriers to market entry).
   – Develop policies that promote rational resource allocation.
   – Encourage crop diversification through market signals.
   – Develop a legal framework that strengthens the private sector.
   – Increase in business registrations and business licenses.
   – Reform and create appropriate laws and regulations to promote the private sector, such as in constitutional reform and land tenure.
   – Increase rural savings and volume of food crops stored.
   – Raise rural working capital and farming profits.
   – Increase number of jobs and number of operational firms by attracting foreign investment in export-processing zones.

David Martella: "ADO Issues with the APIs and Indicators"

The session focused on ways to improve the selection of indicators to measure improvements in agriculture-sector activities, especially marketing and agribusiness development, over time.

It usually takes *a minimum of 5 to 7 years to see the impact in marketing or agribusiness development*, 7 to 15 in terms of agricultural research or technology development and transfer, and 15 to 20 in natural resources and environmental management. USAID/W should be aware of this time frame when making reporting requirements for Missions involved in agriculture.

There is an inherent tension between the field

and USAID/W over which indicators are most important. The Missions need information on levels I and II during implementation—that is, the process indicators, related to the present or intermediate time frame. USAID/W, on the other hand, is more interested in levels IV and V, the impact indicators.

ADOs need to know what is going on and think strategically. We must remind ourselves that our projects are a means to reach goals. We need to know the best use of resources.

There is no single best indicator. Indicator use is a process to go through to obtain useful information for those who will use it.

We need a reporting system that identifies the various beneficial activities that affect development. For example, are we seeing improvements in productivity due to technology or some other variable? Real sustainable economic development needs the continued inputs leading to steady improvements because development is a *process* with no neat beginnings and endings.

Staff in sub-Saharan African governments change jobs, on average, every 1.5 to 2 years. This poses a problem for those of us who establish collegial working relationships and try to sustain institution building, because we often have to start all over again with a new cast of characters who may not be as capable as the previous staff.

I am sure that African governments feel the same way about USAID Missions, with our change in staff every two to four years.

Successes

1. AFR/DP is now more flexible on Missions' using retrospective data to capture program impact.

Recommendations

1. We should use indicators to measure social change.

2. We should compare and evaluate the money going to countries with the impact we are having in those sectors.

3. We should improve the feedback and information flow from USAID/W to the field on the indicators and data or information supplied, whether in the APIs or other reports.

4. We may want to strive to get some consensus between the field Missions and USAID/W on the use of indicators and which ones, if any, we can all agree are relatively important and useful.

5. We must balance the need for indicators with the time and other resources, especially funding, that are available.

6. The codes used in reporting documents (e.g., APIs, ABS, etc.) are duplicative and not very useful. We recommend that they be streamlined and made more useful, and have the field help with this review and modification.

July 16, 1992 (Thursday)

Theme: *Agricultural Technology Development and Transfer for Sustainable Market-Led Growth in the Agricultural Sector*

Session 1: A STRATEGIC FRAMEWORK FOR AGRICULTURAL TECHNOLOGY DEVELOPMENT AND TRANSFER IN SUB-SAHARAN AFRICA

Purpose of the Session:
To present the new Africa Bureau Strategic Framework for Agricultural Technology Development and Transfer to Mission ADOs.

Moderator: Michael Fuchs-Carsch, AFR/ARTS/FARA TDT Unit Leader
Presentation: Jeff Hill, AFR/ARTS/FARA TDT Unit: "A Strategic Framework for Agricultural Technology Development and Transfer in Sub-Saharan Africa"
Comments: Darell McIntyre, ADO, USAID/Mozambique
Allen Fleming, ADO, USAID/Burundi
John Mitchell, ADO, USAID/Niger

Jeff Hill: "A Strategic Framework for Agricultural Technology Development and Transfer in Sub-Saharan Africa"

Support for agricultural technology development and transfer is critically important to help increase and sustain the contribution of the agricultural sector to economic growth.

A *technology development and transfer system* involves:

- identifying agricultural and natural resource products for which an effective demand exists;
- determining the level of demand and the opportunities for technological intervention;
- conducting research to develop and supply the technology; and
- maintaining stewardship of technological innovations to ensure that the technologies are used.

An agricultural technology is defined as a policy or behavioral change (intervention) that increases the efficiency (reduces the unit cost) of any activity in a commodity system either at the point of production or in the marketing chain. The *four elements* of an agricultural technology development system are:

- The relevant *policies and regulations* that affect technology development and transfer;
- The *institutions* involved in the development, adaptation, and transfer of agricultural technology;
- The *agents involved in the stewardship* of the technology (i.e., the multiplying, distribution, marketing, and extension of the technology); and
- *The users of the technology* (e.g., farmers, processors, manufacturers of inputs, marketing agents, and consumers).

Six concepts are central to the effective operation of an agricultural technology development and transfer system:

1. Technology development and transfer activities must be *demand-driven* to ensure that they are linked to individual and societal demand for agricultural and natural resource commodities.

2. Technologies should be *sustainable* in terms of maintaining the natural resource base of the community over time while allowing for increases in factor productivity.

3. Technology development should be done on a *commodity-specific basis* within the broad commodity system, including inputs for production, production, harvest, and postharvest handling; processing; and all other phases of marketing of the commodity to the consumer.

4. Technology development should focus on the commodities for which the nation has a *proven or potential comparative advantage* in terms of the production and marketing of those commodities.

5. *Accountability* within the system must be supported so that institutional expenditures and investments can be linked clearly with improvements in productivity and income for the users of the technology over time.

6. *Collaboration* should be a governing principle for the system so that private- and public-sector institutions and organizations are encouraged to participate jointly in technology development and transfer activities.

Applying the strategic framework involves four stages, during which the demand for and supply of technological innovation is balanced:

Stage 1: Identify the effective demand for agricultural and natural resource products. This involves establishing mechanisms or entities to encourage and facilitate dialogue at the national level in setting research priorities. The criteria for selecting commodities should be identified clearly. Both the public and private sectors should work together during this process.

Stage 2: Identify the effective demand for agricultural technology that can help increase the supply of agricultural and natural resources products that are in great demand. This involves assessing the policy and marketing environment affecting investments in agricultural technology and the changes needed to respond more effectively to the demand for new technologies. Evaluate the technical possibilities for improving productivity, the client base for technological innovations, and the socioeconomic factors affecting the use of new technology. Conduct cost-benefit analysis of technology systems.

Stage 3: Develop, adapt, and supply the technology identified to meet the demand. Support organizational and management changes in the National Agricultural Research Systems to encourage a transparent process for establishing a research agenda, policy and regulatory authority, contractual mechanism with financial incentives, and patent safeguards.

Stage 4: Carry out stewardship, including the distribution, marketing, and extension of technologies to ensure that they are used properly. Follow strategies that expand the demand for technology and increase collaboration between public- and private-sector systems to develop, adapt, and distribute new technology.

USAID can promote these efforts with analytical work, support for policy and regulatory reform, and technical assistance and training to build indigenous institutional capacity.

Gender issues deserve special consideration at all stages and at all times in this process because of *the special role that women play* in the production, processing, and marketing of basic foodstuffs in Africa

and their responsibilities for ensuring that household nutrition needs are being met.

John Mitchell: "Comments"

The four stages of development are a very useful concept for the ADOs. We need and appreciate specific guidance like this, involving concrete actions to take, coming from Washington.

Both *Strategic Frameworks* that have been presented at this conference are helpful to field personnel in terms of thinking about all the issues associated with the development of more efficient and effective marketing systems, the role of agribusinesses in those systems, and how to improve technology development and dissemination in Africa.

"Food" is a sociocultural concept in many countries. What are the implications of this for technology development and transfer and agricultural marketing and agribusiness development? We need more research on the sociocultural aspects of food production and consumption as part of our marketing and technology development analyses.

USAID's record on agricultural research in Africa, or technology development and transfer, is not very good. The *Strategic Framework* provides us with good guidance. But what about guidance for the African countries themselves? can we apply this framework to African institutions or encourage Africans to do so?

Alan Fleming: "Comments"

The *Strategic Framework* is long overdue and provides us with a new way of looking at technology development and transfer.

The Commodity Systems Assessment Methodology, about which we heard yesterday, is also a very good model for us to incorporate into our way of thinking. We wonder why it was not more obvious to all of us earlier in our work.

The *Strategic Framework* involves the private sector in our work; clearly this is one of the strengths of the approach being supported.

In Burundi, 85 percent of the funds for operation of the National Agricultural Research System (NARS) come from the donors. Expatriate staff, especially Belgians, tend to dominate the ranks of the staff. This problem must be overcome through training and innovative approaches to financial support for NARS.

Darrell McIntrye: "Comments"

The *Strategic Framework* makes an important point: our goal should be economic growth, not just an increase in productivity. For example, a new variety of wheat might be perfected which gives higher yields than the one currently in use. But if the new high-yielding variety cannot be processed into a tasty, high-quality loaf of bread. Will consumers buy it? Probably not.

This gets back to the point made by John Mitchell, that food is a sociocultural concept that we must keep in mind as we promote development efforts.

Our support for SPAAR (Special Program for African Agricultural Research) has had mixed results. What does the *Strategic Framework* say to us about our future collaboration with international agricultural research institutes and similar programs?

Success Stories

1. Pioneer Seed Corporation in Cameroon has assisted in developing seed for local use, production techniques, research on improved varieties, extension service activities.

2. ISNAR: eight out of ten institutes have completed studies on their respective reorganization and studies on their collaborating national agricultural systems.

3. Botswana: we now have all government senior staff filled by local staff when 30 years

ago there were none.

4. Kenya: Vaccine McCorkle.

Innovations:

1. Dealing with "Big Business" requires different skills than dealing with SMEs; perhaps we need more training to do so.

2. The gender issues need more attention, such as by having more women researchers and having them work with women producers.

3. Different benefits from "stewardship" and "extension" need to be clarified.

4. We need to focus and prioritize our funding of agricultural research activities in each country and between countries.

Recoommendations

1. Link the commodity research system with the marketing system (there are many good examples of this in Kenya).

2. Track the scientific multiplier effects of funding agricultural research or technology development and transfer so that we can justify the investments to USAID/W and host-country governments.

3. Many research activities are not funded by local resources. How can we get local, public, and private resources to fund technology development and adaptation?

4. We need to establish research priorities and link research with the demand for its products.

5. We need to understand the meaning of stewardship in agricultural activities.

6. How can we better measure the impact of trained people on the domestic agricultural research system?

Session 2: A SUBSECTOR APPROACH TO TECHNOLOGY DEVELOPMENT AND TRANSFER

Purpose of the session:

To discuss the subsector approach to technology development and transfer, outline initiatives to foster increased utilization of technology, and identify appropriate roles for USAID and other organizations.

Moderator: Michael Fuchs-Carsch, AFR/ARTS/FARA TDT Unit Leader

Introduction: Jim Oehmke, MSU: "The Issue and a Summary of the Rates of Return Literature on Impact."

Presentations: John Staatz, MSU: "Subsector Development and the Role of Technology."

Duncan Boughton, MSU: "Applying Subsector Analysis and Impact Assessment: The Mali Maize Case Study."

Jim Oehmke: "Rates of Return on Agricultural Research"

The rates of return (ROR) on agricultural research have varied a great deal. Some research has been highly successful in generating greater rates of factor productivity while others have not.

There is substantial literature evaluating the performance of agricultural research in the United States, Asia, and Latin America. Yet relatively little is known about the payoffs to African agricultural research. To date, fewer than a dozen ROR studies have been identified in Africa, compared to 79 in developed countries, 66 in Latin America, and 25 in Asia.

The fundamental *lesson learned* from ROR studies conducted in developed countries, Asia, and Latin America is that *returns to agricultural research are consistently high.*

These ROR studies indicate that investment in agricultural research has provided consistently high payoffs across countries, commodities, and nine periods, with rates of return often in excess of 30 percent and sometimes over 100 percent.

While the high RORs to agricultural research in other parts of the world suggest potentially high RORs to African agricultural research, several questions are frequently raised about ROR evaluations that merit further discussion.

Do ROR Studies Overestimate Research Benefits?

It is argued that ROR studies overstate the benefits from research since analysts seldom seek out research failures for evaluation. While possibly true for past evaluations of specific commodity research, *aggregate studies from Asia and Latin America* measuring the impact of a country's total investment in agricultural research (including successful and unsuccessful projects) also *indicate high payoffs to agricultural research.*

Does the Structure of the Research Institution Make a Difference?

Many studies highlight the importance of sound management in the research institution or system as key to efficiency.

A strong, well-developed and articulated research program has had positive effects on economic returns to research in Brazil (Ayer and Schuh 1972), India (Evenson and Jha 1973), Japan (Akino and Hayami 1975), and the Philippines (Flores-Moya et al. 1978).[1]

1. For full references, see Appendix 2: Select Bibliography.

The rate of return (ROR) is an evaluative measure of long-term investments.

The ROR to a research project can be calculated as an average rate or as a marginal rate. The average ROR assumes total research expenditures are fixed and calculates an ROR to the project (or program) for this total. This is appropriate for *ex post* evaluation (an evaluation of a project after it is completed).

The marginal rate of return (MRR) quantifies the return to the last (marginal) dollar invested in the research project. The MRR is appropriate for assessing the impact of ongoing projects and for guiding resource allocations. Calculation of an MRR is more ambitious than calculation of an average rate of return (ARR), requiring more data, a computer, and econometric software.

High returns to agricultural research in the United States are also linked to close interaction in the research system among scientists advancing knowledge, scientists inventing technology, and farmers producing food (Evenson et al. 1979).

In contrast, the negligible ROR for cotton research in Colombia is attributable to the poor organization of research implied by "unnecessary" research activities (Hertford et al. 1977). Increasing research expenditures would not improve research efficiency in situations like the Colombian case, unless the expenditures are linked to *greater specialization and better research coordination and organization.*

Who Benefits From Research?

Given limited resources, there is always a tradeoff between research programs oriented to meet the needs of different groups. Research priorities should reflect the overall national development strategy. Previous studies reveal that *for domestically consumed commodities, consumers are the main beneficiaries.*

Some studies contend that technological advances increase income concentration due to a tendency to favor "large" farmers, thereby polarizing rural populations. However, research in Asia illustrates that modern rice technology did not adversely affect small farmers and the rural poor. Although early adopters were often large farmers, other groups soon adopted the new rice technology (Hayami and Herdt 1977). Thus, new technology can improve income distribution if it increases the supply of a major food staple more rapidly than the demand.

How Quickly Can Research Generate Meaningful Results?

Both the public and the scientist should be patient with research work. This conclusion is based in part on the observation that "it takes ten years at least to establish one agricultural fact." A leading World Bank agricultural expert also notes that "the idea that a research project of five years will produce anything of use, has no basis in experience" (Cleaver 1991). Consequently, *it may be too soon to expect agricultural revolutions to arise from African agricultural research.*

Research is a lengthy process. We must keep this in mind as we evaluate its impact. *Five and even 10 years may not be an adequate period in which to assess accurately the full impact of agricultural research.* Twenty years may be a more realistic time frame within which to see and be able to evaluate the full impact of technology development and transfer activities.

What Does This Mean for Africa?

The consistently high returns found in Latin American, Asia, and developed country studies suggests that African agricultural research may yield high returns. However, *Africa currently differs from Latin America and Asia in several ways, and these differences may have negative effects on research impacts:*

1. Agroecology

Africa's agroecological situation is more troublesome than those faced by Asian or Latin American researchers. Soils are older and present greater challenges in plant nutrition. In addition, *Africa's two major food crops, maize and cassava, are not indigenous to the continent,* but were imported from the Americas in the 17th century. This fact complicates the problems faced by breeders, pathologists, agronomists and other researchers.

2. Environmental Constraints

Approximately 80 percent or more of sub-Saharan Africa's rain-fed crop and range lands have experienced *moderate desertification,* defined as the loss of up to 25 percent of land productivity, with some areas facing even more severe problems. This loss in productive capacity is among the worst in the world. *In the face of declining land productivity, research may be hard pressed just to maintain current productivity levels.*

3. Physical Infrastructural Constraints

In Africa, many countries have *underinvested in physical infrastructure.* Countries in other regions of the world invested in infrastructure as they invested in their research systems, so physical infrastructure was largely in place by the time research results were ready for dissemination.

Scobie and Posada's (1978) ROR study of rice research in Colombia notes that irrigation infrastructure was in place prior to the development of the new technology. In the United States, the success of hybrid corn research was partly due to the earlier installation of drainage tiles in farm fields, which transformed much of the Midwest from swampland into productive cropland. Similarly,k throughout Asia hundreds of years of investing in irrigation contributed to the impact of the green revolution in rice.

4. Lack of a Long Research Tradition

Most of the research evaluated in Latin America, Asia, and developed countries was done in countries with long agricultural research traditions. In contrast, African National Agricultural Research Systems (NARS) and agricultural universities are relatively new. With independence, *research in sub-Saharan Africa changed its focus* from export-oriented crops like coffee, cotton, and tea to smallholder food crop production. In many cases, the change caused a slowdown in observable research outputs.

African NARS still need time and flexibility to refocus their broadened mandate and *train African personnel* to replace expatriates. In addition, *fiscal constraints*, reflected in low civil service salaries and small operating budgets, make it difficult for NARS to keep their top scientists, which disrupts the continuity of research programs.

Although these problems clearly need solutions, they constitute typical growing pains of young research systems. The implication is that it is too early to expect a large-scale transformation of African agriculture into a modern, highly productive system; this is still decades away.

This does not mean that research projects with low RORs should be considered acceptable in Africa merely because they are African. It does mean that assessment of African research should be based on how adequately these systems achieve realistic goals.

5. Unachievable Goals

The African NARS are young institutions working under difficult conditions in environmentally sensitive areas. Often these institutions, along with other components of the international research system, have been given impossible mandates.

Developed countries, as well as African politicians, sometimes set unattainable goals. For example, the World Bank argues that:

The primary source of [African economic] growth, at least for the next decade, can only be *agricultural production.*

Japan, India, and Indonesia all reaped substantial benefits after decades of sustained support to agriculture, including the establishment of agricultural colleges. In the United States, the first land-grant college specializing in agricultural research and teaching was established in 1855, and 35 such institutions were in place by 1870. All the evaluations of U.S. research focus on the 20th century. By the dawn of the 20th century, U.S. research had benefited from the preceding 50 to 100 years of institutional development.

The [World Bank] proposes a *target agricultural growth rate of 4 percent annually*. (Landell-Mills, Agarwala, and Please 1989).

In contrast, from 1950 to 1982, U.S. agricultural productivity grew at a compound annual rate of less than 2 percent (Evenson, Landau, and Ballau 1987).

Given the difficulty of working in African conditions, some of which have been listed above, the *target of 4 percent average annual agricultural growth is unrealistic on a continent-wide basis.*

More realistic goals for African NARS include

- institutional development,
- training of African scientists, and
- the emergence of new techniques that increase the profitability of farming.

In some instances, success may be merely holding productivity constant while combating further environmental deterioration. In other cases, success may mean large productivity increases. As African NARS mature, we should see an increasing number of research success stories.

6. Results from Africa's ROR Studies

Although fewer than a dozen *ex post* ROR studies have focused on African research efforts, these studies suggest that research in Africa has acceptable RORs (see Table, p. 89). These studies include specific projects in five sub-Saharan African countries as well as two continent-wide studies on the returns to research and extension.

The results are similar to studies from other parts of the world: *rates of return of 30 to 60 percent and positive returns* even for those studies that were for commodity-based, aggregated national and international research efforts (as compared to return studies focusing solely on individual research projects).

The results of these studies imply that successful research in Africa is possible. This is particularly encouraging in light of the apparent decreases in overall productivity of African agriculture. Therefore, *we should be trying to learn the reasons for these successful efforts* to improve our future research efforts.

After reviewing the literature on rates of return on agricultural research, the following working hypotheses emerge:

1. Many if not most research outputs are partially embodied in physical capital inputs or outputs.
2. The impacts of agricultural research and technical change increase as the availability of capital (in all its forms) increases.

The first hypothesis is corroborated by numerous examples. Improvements in tillage techniques may require investments in plows or animals, each of which is a form of capital. Improved livestock breeds are adopted only after the farmer invests in the new animal, which is a capital investment. Hybrid and improved variety seeds are another form of capital.

The second hypothesis follows in a straightforward manner from the first. If research outcomes are at least partially embodied, then farmers and others can take advantage of these outcomes

SUMMARY OF RETURNS TO AFRICAN AGRICULTURAL RESEARCH

Authors	Year	Country	Commodity	Period	Result
Abidogun	1982	Nigeria	cocoa	N/A	42%
Evenson	1987	Africa	maize and staple crops	1962–80	30-40%
Norgaard	1988	Africa	cassava	1977–2003	149*
Schwartz	1989	Senegal	cowpea	1981–2015	63%
Karanaja	1990	Kenya	maize	1955–88	40-60%
Mamicato	1991	Kenya	maize	1955–88	58-60%
Makua	1984	Kenya	wheat	1924–74	33%
Ahmed and Sanders	1991	Sudan	sorghum	1977–2013	22-39%

* Benefit/cost ratio.

only if they have access to the physical items embodying the results.

The embodiment of research and farmer's capital constraints have important ramifications for the adoption of research results.

In 1964, Theodore Schultz transformed researchers' perspectives on agricultural development with publication of the book *Transforming Traditional Agriculture*, in which he argued convincingly that *developing country farmers are poor but efficient.* In the context of the working hypotheses, this means that developing-country farmers have *very limited access to capital and capital services, and consequently have limited ability to adopt modern techniques.* These techniques may include those developed by a national agricultural research system. This has several implications for African agricultural research:

1. Successful Techniques for Subsistence Farming Will Require Minimal Farmer Investment

Subsistence farmers do not have the financial flexibility to forgo today's consumption to invest in capital, even if that capital will increase tomorrow's consumption. Consequently, research should focus on new techniques that do not require large financial investments by farmers, either in terms of up-front costs or in terms of diminished yields during the period in which farmers learn the new technique.

For example, a fertilizer-responsive *hybrid variety* may not be adopted if farmers do not have access to the financial capital or dredit to purchase fertilizer. *Animal traction* will not be used if farmers cannot afford to buy (invest in) animals. *Row cropping with nitrogen-fixing legumes, windbreaks*, or other agroforestry techniques may not be adopted if farmers cannot afford to plant trees.

2. Research Effectiveness is Increased When Research Programs are Coupled with Policies that Alleviate Capital Constraints

Examples include:

- Development of marketing and transportation infrastructure to provide fertilizer and insecticides to farmers, or to provide a sales outlet for cash crops;
- Dissemination of knowledge or crop insurance to prevent an initial period of diminished yields;
- Accumulation of physical capital to develop

an irrigation project; or
- Availability of credit to cover up-front costs, or other forms of capital accumulation.

3. Successful Research will Alleviate a Capital Constraint:

Adaptive farming systems or other research approaches may gain in effectiveness by transforming a new technique's dependence on a particular type of unavailable capital to a dependence on a different, yet available type of capital.

For example, suppose that a high-yielding variety requires nitrogen to obtain the high yields, but that foreign reserves are scarce and not used to import chemical fertilizers. A farming systems project that develops a scheme for intercropping with a native, nitrogen-fixing legume (e.g., acacia) may provide a solution. In this case the research has provided the transformation from a dependence on a scarce type of capital (foreign exchange reserves) to a more readily available domestic capital (the acacia tree).

Conclusions

Although the amount of money spent on African agricultural research is large in absolute terms, it is small relative to the value of African agricultural production: less than 0.5 percent of gross domestic product originating in agriculture. Under any conditions, and particularly those is Africa, it is not surprising that annual investments in agricultural research of 0.5 percent of agricultural GDP have not met the unrealistic expectation of generating a 2 to 4 percent annual increase in agricultural GDP on a consistent basis.

This low level of funding, combined with the amount of time normally needed to conduct meaningful research, means that generating large increases in the value of production will be a lengthy process.

The youth of most African agricultural research systems suggests that in the future, success stories could be more frequent. However, this possibility depends on three important factors:

In contrast, the "failure" of Malawian maize research in the early and mid-1980s may have been caused by *the unavailability of appropriate processing and storage services*, both at the farm level and at a more aggregate level. Malawian maize research through the mid-1980s focused on dent (soft) maize varieties. The imported and domestically developed dent hybrids nearly tripled yields on farm fields; but cob rot, insects, and processing problems effectively prohibited farmers from storing this product for their own consumption. In the absence of a market for their surplus, adoption was minimal. Recent research is focused on hybrid flint (hard) varieties with yields comparable to the Malawi hybrid dents, with initial distribution in the 1991–92 season. Because these varieties do not require elaborate storage facilities (i.e., investment in additional capital), the potential for adoption is high.

- Sustained investments in research infrastructure and personnel;
- Maintenance of the continuity of promising research programs; and
- Ability of farmers (and their households), input suppliers, output processors, and others in the food system to use research results.

The success of research is linked ultimately to the performance of the entire commodity system—from production through marketing to consumption. Although these linkages are not the primary focus of this paper, *the existence of an efficient, vertically coordinated commodity system is implied in most research impact studies with high rates of returns.*

John Staatz: "Subsector Development and the Role of Technology"[2]

How do new technologies developed under the Collaborative Research Support Programs (CRSPs) affect household food security?

The term *food security* first came to prominence during the World Food Conference in Rome in 1975. At that time, crop failures in Asia and the Soviet Union combined with low stocks in major gain-exporting countries to create rising world food prices.

The 1975 conference, therefore, endorsed a two-pronged approach to improve global food security:

- *to increase food production* in food-deficit countries (this has been the main focus of the CRSPs), and
- *to establish national and international emergency reserve food stocks* to deal with temporary local shortages.

Since 1975 the world food situation has changed dramatically, and so has the concept of food security. For example, despite increases in per capita food production throughout most of the world during the 1980s, Africa still suffered from food insecurity. While drought and civil disruption led to severe famines in several parts of Africa, a more fundamental cause of famine in 1980s Africa was *a lack of purchasing power* by many African countries while world markets were awash with grain.

In parts of Asia, increased per capita food availability did not solve all the hunger problems. While India became a net exporter of food grains during the 1980s (even sending emergency food to Ethiopia in 1985), many Indians still went hungry.

These situations led the international community to recognize that *improving food security involves more that just increasing the supply of food; it also requires increasing access to food.*

> Food production per capita in developing countries increased by 12 percent between 1974–76 and 1987– 89, despite a population increase in those countries of nearly a billion people (FAO). Increases in food production and per capita incomes were greatest in Asia, the area of most concern during the 1975 World Food Conference.

The World Bank now defines food security as "access by all people at all times to enough food for an active and healthy life." A similar definition has guided much of the work under Michigan State University's Food Security in Africa Cooperative Agreement with USAID:

> Food security is the ability of a country or region to assure, on a long-term basis, that its food system provides the total population with a timely, reliable, and nutritionally adequate supply of food.

These definitions have several implications for how one develops policies and technologies to improve food security.

1. Access Is as Important as Availability

Improving food security requires not only increasing food *availability* (or *supply*), but also people's *access* to food (or, to use the economist's term, their effective *demand* for food). Viewing food security as a question of access, as well as availability, helps make clear the distinction between *food security* and *food self-sufficiency*.

- *Food security* refers to the capacity to ensure access to an adequate supply of food, which may come from own production, purchases, or gifts.
- *Food self-sufficiency* refers to the capacity of a country, region, or household to produce directly all the food it consumes. Food self-

2. Research for this paper was carried out under the Food Security Act in Africa Cooperative Agreement between Michigan State University and USAID under the Bean/Cowpea CRSP.

sufficiency is thus a much more restrictive concept than food security.

The strategic question facing both the individual farmer and the nation is which use of resources is the least costly and most reliable way of getting one's food. An *integrated food security strategy* thus needs to consider more than just domestic food crop production.

2. The Need for a Food Systems Approach

Food security depends on the ability of the entire food system to provide access to an adequate supply of food. By *food system*, we mean the entire set of actors and institutions involved in input supply, farming, and the processing and distribution of agricultural products (including their links with international trade).

Improving the ability of the food system to deliver food at low cost to consumers requires increasing the efficiency at each level of the system and improving the coordination among the various levels. Thus, while developing higher-yielding or more stable-yield crop varieties for farmers is one important step in strengthening food security, it is not enough in and of itself.

Efforts to improve the reliability of food markets (e.g., through technologies aimed at improving the storage of commodities as well as policies making it easier for farmers and private traders to operate) *represent other crucial activities to improve food security.*

Taking a food systems or subsector approach is particularly important if one wants to try to improve food security through encouraging specialization and trade. It makes little sense for a farmer to produce cotton or nonagricultural products to sell for food if that farmer cannot rely on the market to make food available when needed at reasonable cost.

3. Food Security at What Level?

Food security can be analyzed at many different levels of aggregation, but our focus is the food security of the household.

During the 1980s, analysts studied food security problems at more disaggregated levels, such as village, household, and individual. A common finding of much of this research was that there exists much greater *heterogeneity* than previously thought in the level of food security among many rural households and in the strategies they follow to gain access to food.

The most striking results of social science research conducted under the CRSPs and elsewhere in developing countries is *how much rural households differ from one another in their resources and institutional environments.* It is now recognized, for example, that technology that is well-suited for an extended family that has clear title to its land may be inappropriate for a female-headed nuclear family that sharecrops.

Less well appreciated is the wide range of strategies that rural households use to ensure their own household food security. Strategies often have important gender dimensions, as men and women play different roles in helping ensure household food security.

Many household food security strategies rely heavily on earning income to purchase food through the market. This reliance is strong, even in the grain belts of many African countries. For example, recent research found that, following two relatively abundant harvests in 1985 and 1986, 43 percent of the households in the two best agricultural zones of Mali (the CMDT and OHV) were net grain buyers.

The dependence of rural African households on the market for food is particularly pronounced during the hungry period just before harvest. Recent research illustrates that those households which have followed *a more diversified income strategy* and placed *greater reliance on the market for food had a more stable consumption pattern throughout the year* than those who derived most of their food and income from their own cropping.

A key lesson learned from this research is that *households living in risky environments* (e.g., where rainfall is highly variable from year to year)

diversify their sources of income and rely heavily on the market to help ensure their food security.

A second key message is *the importance of driving down the real price of food* for the many poor rural and urban consumers dependent on the market for a good deal of their food supply if food security is to be improved.

Cost-reducing technical change in the production of basic staples plays an important role here.But often equally important are *improvements in the efficiency of the marketing system for basic foods.*

In many African countries, marketing costs account for 50 percent of the final consumer price of staples. In such cases, a 10 percent reduction in marketing costs has the same impact on consumers as a 10 percent decrease in the unit cost of production of basic staples.[3] This has clear implications for a technology development strategy.

4. Implications of Diversified Household Food Security Strategies

When designing technology to improve household food security, the first question to ask is *whose* food security are we trying to improve?

For households in relatively high rainfall areas, having secure access to land, and an adequate family work force, the lack of streak-resistant maize varieties may be the major constraint to household food security.

For households in semiarid areas following a diversified income strategy, improvements in small-ruminant production may be a more cost-effective way of improving household food security, even though these households may eat very little meat. The increased income from greater small-ruminant production allows them greater access to grain through the market.

And for those highly dependent on the market for part of their food, both in rural and urban areas, increased efficiency in staple food production in high-potential zones and *improvements in the marketing system* may be the most effective ways of improving household food security.

For example, the estimated cost of production of maize in southern Mali in 1989 varied between 27 CFA francs per kilogram (10 cents per kilogram) and 64 CFA francs per kilogram (24 cents per kilogram), depending on whether one valued household labor at zero opportunity cost or at the estimated rural off-farm wage rate of 600 CFA francs per day ($2.22 per day). For millet and sorghum, using manual cultivation, the comparable figures ranged from 2 CFA francs per kilogram (less than 1 cent per kilogram) to 63 CFA francs per kilogram (24 cents per kilogram). Obviously, the relative attractiveness of maize versus millet production depends on what types of outside employment opportunities are available to household members.

From a food-security perspective, the intended beneficiaries of technical research may be different from those who adopt the new technology. For example, poor urban consumers may be the main beneficiaries of improved technology designed for and adopted by large-scale commercial farmers, if such technology drives down the cost of food to those consumers.

The diversified income/food security strategies of poor rural households affect the types of technologies these households are willing to adopt. Noncropping activities, including off-farm employment and seasonal migration, may occupy a large part of household members' time and be an integral part of their strategy to obtain food for the family. These off-farm activities can imply a high opportunity cost for household labor during certain times of the year. *The higher the opportunity cost of labor, the more attractive it becomes for farmers to adopt crop technologies that substitute purchased inputs for labor.*

Similarly, the willingness of rural households to adopt resource-conserving (sustainable

3. A 10 percent decrease in unit costs of production is the equivalent of a 10 percent increase in total factor productivity—i.e., technical change that allows a farmer to get 10 percent more output for the same value of inputs.

Many of the practices and investments promoted in the Sahel to conserve resources, such as the construction of dikes and bunds, implicitly assume a very low opportunity cost for household unwillingness of many farm families to adopt such practices is a function of the diversified income/food security strategies they follow in the semiarid areas. The trade-off that families face in the dry season is not between allocating household labor and capital to constructing bunds or having these resources sit idle; rather, it is the choice between constructing bunds or seeking a bus ticket to the city to work as a seasonal laborer.

agriculture) practices depends on the type of food security strategy followed by the household. Having a better understanding of the household's food security strategy and the opportunity costs it implies for family resources will be critical in designing technologies that prove attractive to farmers.

5. Implications of Households Reliance on the Market

The heavy reliance of many rural and urban households on the market for some of their food supply has implications for technical research in at least four areas:

For example, a major constraint to the development of a reliable market for cowpeas in the Sahel is the problem of bruchid infestation during storage. This limits the ability to develop the cowpea market as an alternative source of income for low-income farmers and as a low-cost source of calories and protein for consumers. Currently the Bean/Cowpea CRSP is addressing this issue in Cameroon by breeding bruchid-resistant varieties and evaluating improvements in on-farm storage technologies.

- the commodity focus of research,
- the need to focus on off-farm as well as on-farm constraints in the food system,
- the geographic focus of research, and
- the need for simple market analysis to help target agricultural research.

Commodity Focus

Because farm households, particularly in lower-rainfall areas, derive a significant portion of their access to food from noncrop enterprises, technical research to improve food security needs to embrace more than food crop production. The existence of the Small Ruminant CRSP demonstrates recognition of this fact.

In many areas, for example, cash cropping by smallholders is positively and strongly correlated with increased household food security. Hence, technical research on cash crops may make important contributions to household food security.[4]

We suggest, therefore, that national agricultural research systems consider these activities as part of their food security research portfolio. In particular, CRSPs should strive to develop food-crop and livestock technologies that are complementary to, rather than competitive with, these other enterprises.

Off-Farm Constraints in the Food System:

Given the heavy reliance of many poor families on the market for food, a key focus of research should be on lowering the cost of food delivered to consumers through the market. This involves technical developments that improve the ability to sort, store, handle, and process products as well as institutional changes that facilitate marketing.

4. The effect of cash cropping on household feed security depends on many factors including, among other, the nature of the crops involved and the prevailing land tenure and marketing arrangements. For an introduction to the large literature on this topic, see: Mazwell and Fernando; the April 1989 issue of the *IDS Bulletin*; Von Braun and Kennedy; and Dione.

One important aspect of the problem is the need to synchronize technical work in processing with development of new varieties. In particular, varietal selection criteria need to include not only farm-level constraints but also the ease of transforming the variety into products preferred by consumers.

Both urban and rural households have high opportunity costs of time. Thus, reducing the cost of delivering the product to the consumer's plate may be more important than lowering the cost of the unprocessed product in the market.

In urban areas, women (who are still primarily responsible for most food-preparation tasks) face increasing opportunity costs of their time and fuel costs are high. Innovations such as parboiled sorghum—developed under INSORMIL—which reduce preparation time and fuel costs, may lower the final cost to the consumer of the food even though its price per kilogram is higher than the unprocessed product.

Given the skewed income distribution in most poor countries, the market for highly processed products will be very limited in the near future. Significantly expanding the demand for the raw commodity in most poor countries implies developing new low-cost products for the masses, not upscale products for the urban middle classes, which will contribute directly to the food security of the poor urban and rural consumers.

Geographic Focus of Research

From a *national* food-security perspective, there can be high payoffs to focusing technical research *in areas where there is potential for large productivity gains.* Typically, these are *higher rainfall areas.*

We are not advocating that research abandon areas that are less endowed with natural resources. But we are suggesting that *it may be more efficient and environmentally friendly* for people in these areas to produce relatively fewer crops and more noncrop commodities, such as livestock, which they could trade for staples, rather than produce the staples directly.

Much of the environmental degradation in semiarid Africa, for example, is often due to insufficient productivity growth in staple food production in higher potential areas. The lack of productivity growth in these well-endowed areas, combined with increased population pressure, leads farmers to migrate into more fragile areas that traditionally were devoted to grazing or forestry.

Use of Market Analyses to Guide Technical Research

Because so many people rely on the market for part of their food, simple analyses of existing price and market data may help identify research priorities. The priority-setting process must consider the *most important* constraints to improving household food security, assess alternative opportunities to relax these constraints, and identify specific research strategies.

Success in priority setting requires that the participants understand both the role of the commodity in the food system and the linkages between interdependent components of the system. Thus, factors exogenous to the farm are likely to have a major impact on the commodity, and changes in farm-level factors will affect the rest of the economy.

Subsector analysis can guide scientists in setting in-country research priorities by helping researchers gain a view of "big picture."

Rapid Appraisal Subsector Studies (RASS) can be carried out by a multidisciplinary team of social and technical scientists, who focus on synthesizing data collected from secondary sources and key informants to generate an overview of the historical and current status of:

- demand (domestic and foreign),
- supply (production and imports),
- institutional environment (e.g., research, extension, marketing system, land tenure),
- government policies (e.g., prices, subsidies), and
- insights on gender, access, and equity dimensions of the subsector.

RASS techniques are useful not only in identifying research priorities at the beginning of the project. These studies also need to be repeated periodically to monitor developments in the subsector that have important implications for technical research.

RASS analysis can provide considerable information relevant to establishing technical and social science research priorities, such as:

- Who consumes the commodity, how important is it in their diet, and in what form it is consumed (type of processed products)?
- What grain characteristics (e.g., size, color, cooking quality) do local consumers prefer? To what extent do households rely on other complementary or joint products, such as leaves for sauces and straw for animal fodder?
- Is there a potential for export or import substitution? If exports are a target market, what are the quality characteristics desired in the target market?
- What are current yields, types/levels of inputs used, costs of production, and major constraints that farmers, traders, and consumers face?
- Who grows the crop (e.g. men or women, small or large landholders, owners or tenants, irrigated or rain-fed farmers), and how important is each group in terms of its share of total production and its share of total farmers producing the commodity?
- Do farmers (which ones) have access to credit, input and output markets, extension services?
- What government policies create incentives/ disincentives to farmers, traders, and consumers, such as controlled prices, tariffs, subsidies, and export taxes?

The key to the success of a RASS analysis is the active involvement of both technical and social scientists. The role of the technical scientist is primarily to provide insights about the technical aspects of the target commodity. The role of the social scientist is to put the commodity into a subsector context by highlighting farmers, farm-household, trader, consumer, gender, institutional, government policy, and international trade dimensions of the subsector.

Conclusions

Households in developing countries engage in a wide variety of activities to help ensure their access to food. The diversity of their activities determines how they will react to new technologies developed by agricultural researchers. In particular, the diversity of strategies means that *cropping activities must be viewed in a systems context, where the noncrop enterprises help determine the opportunity cost of household resources.* These opportunity costs affect farmers' willingness to adopt new technologies.

Many rural and urban households' heavy reliance on the market for food implies that a major focus of research should be on driving down the real cost of food through increasing the efficiency of the marketing system.

We should also encourage a demand driven approach in technology development: produce what people want so that they have the means to pay for it.

Duncan Boughton: "Applying Subsector Analysis: Maize in Mali"

1. The Approach of Subsector Analysis

The subsector approach requires understanding the processes undertaken at each of the different steps in the subsector and analyzing the behavior of the actors in the system.

- *Subsector:* The vertical set of activities, organizations, resources, laws, and institutions involved in the production, processing and distribution of an agricultural commodity.
- *Vertical coordination:* All the ways of, and mechanisms for, harmonizing the commodity-specific activities involved in production and marketing.

2. Results of the Mali Maize Subsector Rapid Appraisal

Production

Statistics from the DNSI (National Statistics Office) indicate that the area planted with maize has evolved in a seesaw manner from 1980–81 to 1990–91.

Area and production did not demonstrate a drastic drop despite the liberalization of cereal prices and the withdrawal of the CMDT from marketing this crop. Farmers have continued to produce maize in different forms. Maize remains a secondary crop at the national level (on the order of 10 percent of land and 15 percent of cereal production).

Adaptive behavior of the farmer in the CMDT zone: The CMDT requires cultivation of cotton for farmers to qualify for credit for other crops. This means that only the best growers of cotton and other cash crops (peanuts and sesame) are able to benefit from input credit for cereal crops like maize.

CMDT grain board subsidies were too costly and led to bankruptcy because of the variable prices. Thus, CMDT withdrew its product and credit scheme.

Maize is always sold for a lower price than other cereals. Therefore, farmers elaborate their own strategies. For example, *production to satisfy family cereal consumption and to pay outside labor (in the case of farmers with tractors).* The area cultivated and the choice of varieties seem to be based on home consumption needs rather than market considerations.

Marketing Conditions and Operations

Financing the operation: The financing method is regulated by a moral contract between the buyer and wholesaler or semiwholesaler. Purchases are prefinanced by the wholesaler or the semiwholesaler or by the assembler. In a number of cases, the financing obtained by the wholesaler's buying agent or the semiwholesaler covers more than just cereal marketing. The purchase of products like arabic gum, seeds etc. are also financed by the same sources.

In general, the extension of credit and the stipulated period for delivery of the cereal or reimbursement in cash are not rigidly set; they are perpetually renegotiated. *Everything depends on reciprocal trust*. Interest is not charged on such credit.

Sharing the costs: The supplier of funds generally delivers the sacks for the grain. All other charges are covered by the buyer. In particular, these include handling charges (transportation from the place of purchase by truck and by truck to the warehouse), transportation, etc. Net margins for buyers rarely attain 10 CFA francs per kilogram for cereals (these are generally between 2.5 and 5 CFA francs per kilogram).

Storage: Storage takes place on cobs or as grain. On the farm, storage on the cob is more

A FOOD SYSTEM MATRIX

Illustrative Production and Marketing Activities:

- Distribution of inputs
- Extension
- Production
- Processing
- Storage
- Transportation
- Buying and selling
- Financing
- Coordinating functions:
  - Setting the price
  - Quality control
  - Regulations
  - Property rights
  - Contracts
  - Risk management
- Consumption

frequent because it seems to protect the grain from insect attacks. Farmers who store their harvest in grain form (after threshing) use insecticide treatments. These are frequently toxic, like DDT powder or phosphine. This practice seems to be most widespread among farmers with tractors who are large maize producers.

Yet maize is hardly ever stored collectively at the village level. The introduction of improved granaries has not been successful in the CMDT zone. Design errors have resulted in important losses for certain villages (for example, a granary built directly on the ground when it should have been built on piles).

At the merchant level (assemblers, semiwholesalers), the practice of storage was not evident. *The market agents we interviewed emphasized that storage is not a profitable operation for them.* They make their money by turning over their capital rapidly. However, further investigations are necessary at the wholesaler level in Bamako concerning maize storage.

Marketing period and price: The marketing period for maize is short. In effect, maize becomes rare in the market after February. In general, maize is sold in rural markets for lower prices than other cereals. Maize is most in demand when there are shortages of other cereals.

Transportation: Merchants do not have their own vehicles; they borrow or rent trucks that regularly visit rural markets. Sometimes merchants collectively rent a truck to transport their cereal products and passengers simultaneously. The transportation fares paid by the ordinary passengers cover the rental cost.

Price and marketing margins: Prices at the production level in rural markets and consumer prices in consumption zones show large gross margins. For the marketing axis Fana-Bamako, the average gap between the producer price and consumer price is on the order of 35 CFA francs per kilogram. These price differentials correspond to the marketing margins that are captured by the merchants. Transport costs range from 5.0 to 7.0 CFA francs per kilogram over most routes; marketing margins range from 5.0 to 20.0 CFA francs per kilogram over most routes. Therefore, *methods to enable farmers to capture a portion of these margins should be analyzed.*

For example, farmers might participate in assembly and bulking of their own produce. To carry out this task, good organization is essential. A federation of villages in the CMDT region of San was able to gather and store cereal surpluses in an accessible location and negotiate a price 10 CFA francs per kilogram higher than the prevailing market price.

High transport costs and the relatively large number of intermediaries handling the commodity may be what is driving up the price in Bamako.

Processing and preservation: The labor involved in processing maize is often cited as the most important factor for the existing low levels of consumption. The pounding of maize (dehusking, grinding etc.) involves hard labor for women. Certain varieties (like Tiemantie) are particularly well known for their hardness. Women sometimes ask their husbands to change to varieties that are less tiresome to pound.

Maize is more expensive to process than other cereals.

Semiprofessional processing (neighborhood mills) equipment is not adapted for maize transformation (no maize husker at San, so a rice husker is used, etc.).

Semi-industrial processing, like the flour mills installed in the CMDT and ODIMO regions, offer possibilities for diversification into a number of products made from maize (large grits, medium grits, fine grits, others), but the quality of the products fabricated by these mills is not the best. Black spots appear in the sacks of packaged products, caused by the presence of maize germ.

Grits are also produced by women using artisanal processes. The quality of the product is clearly superior and the marketing strategies are more effective—that is, the quantity produced is modulated as a function of sales, and the largest

proportion of the processed product corresponds to that which is in highest demand by consumers.

Price per unit for the packaged product (i.e., price per sack) remains unvarying. It is the quantity in the sack that varies with the rising price of the raw material. *The problem of maize processing remains central to the issue of stimulating consumption.* The problems of degerming and the fabrication of new products adapted to the taste and financial resources of consumers remain the key issues.

Consumption

Human consumption: Data from the 1988–89 budget-consumption survey reveal that the consumption of maize is relatively weak in comparison to other rain-fed cereals. The level of consumption is linked closely to the level of local production, which signifies that the majority of maize that is produced is consumed in the same place. For example, in the regions of Kayes and Koulikoro and in the Bamako district, *sorghum* is the most popular cereal, while in the Sikasso, Segou, Timbouctou, and Gao regions *millet* is consumed the most. Maize consumption remains important in the Kayes and Sikasso regions.

- Why is maize consumed less than other cereals?
- Why is production oriented toward home consumption?

The answers to these questions are linked to *problems of processing and marketing.*

In a number of rural zones, yellow maize is alleged to be the origin of certain illnesses (malaria, impotency, etc.), which, of course has a negative influence on the level of consumption. However, *in urban areas, consumers prefer yellow maize*. Thus, there is a lack of congruence between urban consumer preferences and the current orientation of production.

When thinking about promoting maize production (which will require the establishment of reliable markets) what measures must be taken to satisfy the demands of consumers? What role will the breeder, processor, etc. play in meeting those demands?

Animal consumption: There are few statistics on this subject, but the use of maize grain in animal feed again remains very low. Preliminary surveys indicate that maize is being used in animal feed, notably for poultry.

Some industrial production units for poultry feed have begun to emerge. A strong, potential demand exists in this area. Poultry producers, like urban consumers, also demand *yellow maize.* The yellow pigmentation of the feed influences on the coloring of the eggs.

Industrial consumption: In Mali, factories like "BRAMALI'L (the brewery) , "SOMAPIL" (a dry-cell battery company), and many textile outfits use maize in different forms (degermed grits, very fine de-germed flour). Annual requirements are only several hundred tons per year. But to be able to satisfy this market, some steps have yet to be taken, including increasing the capacity to degerm maize and being able to produce a very fine flour (on the order of 150 microns). Currently, only "Les Grands Moulins of Mali" can accomplish this degerming at a capacity of 50 tons per day.

Session 3: BREAK-OUT SESSIONS ON THE SUBSECTOR APPROACH

John Staatz (Moderator): "Group One Results"

A lot of research done has been done and information collected but that information has not been used by the relevant African research institutions.

Recommendations:

1. *Research technologies that are applicable and transferable across crops and sectors are needed*, especially multipurpose fertilizers, animal traction, and short- and long-rotation crops.

2. Research technologies that address constraints identified within specific commodity systems are also needed. *Most constraints seem to be off-farm, marketing constraints*, not production constraints.

3. There are *cross-sectoral linkages*: if we can increase the demand for milk (and other dairy products) and poultry, the demand for animal feeds like maize, millet, and sorghum will also increase.

4. We need more *socioeconomic research*, such as on producer household decision making, contract enforceability, good-faith issues between traders and producers, and the whole role for the public and private sector in all this.

5. Agribusinesses are interested in products not technologies. Therefore, we need to identify and work with the private sector on local, national, and regional levels. We need to know who is doing what and why they would want to do something else or do it differently.

6. We should assist governments focus on certain interventions and avoid duplication. Making the right research commodity choice can help generate faster development.

Duncan Boughton and Jim Oehmke (Moderators): "Group Two Results"

ISSUE: How can we improve the efficiency of research and move towards effective technology transfer?

Which research initiatives will promote increased utilization of technology in this system?

Recommendations:

1. Make technology development an open process, involving the public and private sectors.

2. Set clear priorities for research given the limited resources.

3. Set priorities based on the function of end users' needs.

4. Develop and institutionalize a process that provides end-user feedback to the research system.

5. Promote the creation of a market for technology and a market-based research system.

6. Look for opportunities for private-sector involvement to make research more demand driven. Successful examples include Mali: Ciba Geigy and Lesotho: Pioneer Seed Company.

7. The private sector may bring a depth of technical skills and marketing capability that the public sector does not have. (In the United States, technology transfer is primarily commercialized.)

8. Identify factors that appear to contribute to success for research products by conducting assessments (doing profiles) of cases where a technology is adopted.

9. *The appropriate role for USAID in the commodity system* includes:

   - Identifying and analyzing key agents and constraints in the research and technology dissemination system;
   - Suggesting and supporting problem-solving techniques that involve farmers, economists, research staff, and agribusinesses.
   - Getting the word out on successes to facilitate transfer of practices within Sub-Saharan Africa;
   - Encouraging researchers in different countries to interact and work as a network (CRSPs);
   - Encouraging NARS to create a process to set priorities, including open discussions involving end users (as defined by subsector approach); and
   - Identifying and fostering joint ventures and private-sector involvement in agricultural research, technology development, and transfer (dissemination).

Rick Bernsten and Phil Serafini (Moderators): "Group Three Results"

There are examples of technology that USAID developed for Africa being transferred to the United States. This shows one benefit of foreign aid, especially agricultural research.

Soybeans, which were developed at agricultural research stations in East Africa, were then transferred to Iowa where they are being cultivated successfully.

In addition, *a clay* used by African farmers to mix with peanuts so as to absorb some of the peanuts' aflatoxin (so that they may be sold for confectionery uses) *is being examined by USDA and the FDA for approval and use in the USA.*

Recommendations:

1. Institutionalize the analytical capacity within the host country to achieve sustainable monitoring, evaluation, and reporting on developments within the sector over time to take place.

2. Look at the new application of a subsector approach to achieve efficiency. A subsector overview should only take from one to three months using the RSSA approach.

3. We need to determine how we can monitor and evaluate effectively a subsector (or commodity system) that is undergoing fairly rapid change.

4. Research systems need to look beyond production to processing and other marketing issues (e.g. storage) to help increase the productivity of the sector and commodity system.

5. Storage issues:

   - The technology must fit the commodity; there are unique storage requirements for maize, millet and sorghum. (Storage can help farmers and the nation manage drought cycles better.)
   - What roles should the public and private sectors play in storage of basic foodstuffs? (Central Storage versus on-farm or regional and local storage?)
   - What price policy best supports increases in productivity and investments in storage? Price stabilization (agovernment role?) or free-market pricing (a private-sector role?).
   - Extend the shelf life of commodities through storage (and processing).

6. What technology will help farmers make more effective use of water resources? (In the Sahel water is too deep and, therefore, too expensive to lift given current hand-powered technologies and the few existing mechanized technologies. Most of Mali is away from open water.) Will wind-powered pumps be the answer?

7. If the technology exists, we need to promote its adaptation and then its use, especially by working with the private sector. Currently, there is little private-sector involvement in the marketing of agricultural technology in Sub-Saharan Africa:

   – $2 billion worth of fertilizer sold in Africa in 1991;
   – $1 billion worth of machinery sold in Africa in 1991;
   – $.7 billion worth of improved seed sold in Africa in 1991.

Successes:

1. High rate of return for investment in "T and V" (training and visit) systems is illustrated by a World Bank evaluation. (Question: How many governments have funded this system?)

Improvements:

1. How can we help to improve relations between the research and extension systems?

2. How can we help to make extension service programs more sustainable?

Session 4: AGRIBUSINESS AND PUBLIC-SECTOR COLLABORATION IN AGRICULTURAL TECHNOLOGY DEVELOPMENT AND TRANSFER: RESEARCH RESULTS

Purpose of the Session:

To discuss the results of recent research on private agribusiness involvement in technology development and transfer and the conditions for increasing public-private sector collaboration.

Moderator: Rich Newburg, ADO, Burundi

Presentation: Bill Lesser, Cornell University: "A Synthesis of Five Case Studies: Mali, Kenya, Cameroon, Ghana, and Zimbabwe."

Panel Response:

John McMahon, ADO, USAID/Cameroon
S. K. Reddy, ADO, USAID/Guinea
Doral Watts. ADO, USAID Mali

Bill Lesser: "A Synthesis of Five Case Studies"

A broad but incompletely documented range of private-sector involvement and public-private interactions exists across sub-Saharan Africa.

Technology development and transfer are commodity-based and demand-driven. If the commodity subsector expands, then the associated technologies will also flourish.

The five case studies are:

- Mali: mechanical tillage for cotton;
- Cameroon: pesticides, especially for maize;
- Zimbabwe: seed production;
- Kenya: intensive poultry production; and
- Ghana: vegetable postharvest handling.

Findings:

Four areas were examined:

- technology and commodity systems;
- private- and public-sector collaboration;
- stewardship; and
- the policy and regulatory environment.

1. *Widespread technology adoption is dependent on local adaptation.* The closer to agricultural production a technology is used the more local adaptation is needed. This factor provides opportunities for local, private research and development.

2. *The traditional government monopoly of agricultural research, while easing in recent years, continues to limit private sector involvement.* This is generally true because of the parastatal control still held in the case study countries: cotton in Mali, or the low price policy, for maize seeds in Zimbabwe.

3. *National extension programs are inadequately funded to take an effective role in technology transfer and stewardship.* This is generally true. Transportation and training are especially problematic. However, some parastatals are often well financed and perform multiple services, such as in Mali.

4. *Government agricultural policy, including production loan programs, is the major determinant of the market for inputs.* The technology packages in Mali and production loans in

Zimbabwe made a major contribution to speeding up adoption of new technologies among farmers. However, financing adoption of new technologies by farmers will be a major issue with private sector firms. The private agribusiness firms may be reluctant to extend financial services, such as buyers' credit, to farmers.

5. *The absence of appropriate intellectual property rights skews the forms of private investment to appropriable technologies.* While patent law is variable over the region, plant breeders' rights and petty patents are essentially nonexistent. This discourages local adaptation activities, such as breeding open pollinated varieties (Ghana) and developing improved carts and plows (Mali).

General Conclusions:

1. *The less adopted of the technologies studied, poultry and export fruits, share two characteristics compared to the more widely adopted technologies.* First, intensive poultry and export fruit production are far more recent than cotton and seed production. This means that the commodities are at different stages of development and have different requirements. Second, government parastatals provide the sector-wide coordinating mechanism for cotton and seeds. This mechanism is missing for poultry and export fruits and will be difficult for the private sector to develop.

2. *Government policy and extension services remain critical to the success of private enterprise.* Many sub-Saharan African governments lack the political will and wholehearted commitment for broad privatization. At the same time, funding is insufficient for an adequate extension program. It is therefore important for USAID and other members of the donor community to continue funding research and extension activities.

John McMahon: "Comments"

We need to improve the ability of the research institutions to deliver services so that the private sector will be willing to buy their services. The NARS need more or better scientists and equipment.

S. K. Reddy: "Comments"

There are two separate issues here:

One issue is how to encourage more collaboration between the public and private sectors.

The second issue is whether there should be a way for the private sector to fund public institutions to conduct agricultural research for the private sector.

The private sector tends to be interested in specific commodities, especially commercially oriented, export crops. Thus, some ask "Why should we strengthen the private sector?"

A problem is also an opportunity: We should encourage the private sector.

Other Examples

In *Uganda*, the private sector is funding adaptive research on mulberry bushes (silkworms and silk development) and for ornamental plants and flowers. Also in Uganda, the United Nations Development Program is funding vanilla research and seed multiplication and providing a Chinese technician to work on the farm of a private vanilla exporter.

Recommendations

1. Improve and reform research institutions so that the private sector will invest, such as is being done in Uganda.

2. Do not go overboard on private-sector led technology development and transfer. There is still a significant role for the public sector in terms of working with and helping small producers get access to the new technologies.

3. Research institutions have some strength in scientific personnel. What needs improvement most is the equipment and facilities, and the management of the system and the way the system sets it priorities.

Innovations:

1. Demonstrate the incentives for researchers to take private-sector contracts to do private-sector-funded research.

2. Devise new ways to get continued USAID support for African NARS while encouraging and promoting the reform of those NARSs.

Session 5: WHERE DO WE GO FROM HERE?

Purpose of the session:

To draft and agree on an *Action Memorandum* that will summarize the lessons learned from, and the guiding principles of, the Conference and state clearly what we hope to achieve during the next two years.

Moderator: Joanne Hale, ADO, USAID/Malawi

Other Committee Members:

Larry Harms, ADO, USAID/Mali
Thomas D. Hobgood, ADO, USAID/Kenya
John McMahon, ADO, USAID/Cameroon

After a presentation of the draft *Action Memorandum*, there was a lively discussion during which agreement was reached on the document by the Mission ADOs and USAID/W staff present.

(The *Action Memorandum* is printed on page xi of these proceedings.)

Session 6: THE ACTION MEMORANDUM: A DISCUSSION

Purpose of the Session:

To present and discuss the ADO Conference Action Memorandum with Alison Rosenberg (AA/AFR) and Dick Cobb (DAA/AFR).

Moderator: Ben Stoner, Chief, AFR/ARTS/FARA
Presentation: Joanne Hale, ADO, USAID/Malawi
Larry Harms, ADO, USAID/Mali
Thomas D. Hobgood, ADO, USAID/Kenya
John McMahon, ADO, USAID/Cameroon
Comments: Alison Rosenberg, AA/AFR
Dick Cobb, DAA/AFR
Joan Atherton, AFR/DP

Joanne Hale: "An Example of a Success in Agriculture: Malawi"

Malawi demonstrates how working at marketing policy reform and technology development can lead to a major breakthrough in the utilization of new technology and increases in agricultural productivity and rural household incomes.

After many years of research funded by USAID both in Malawi and at the international agricultural research center CIMMYT (Centro Internacional de Mejoramiento de Maiz y Trigo), a hybrid maize seed that meets Malawian farmers' needs has been developed. In addition, the Government of Malawi agreed to privatize the Malawi Seed Company and it is now owned (55 percent) by Cargill.

Policy reforms have *increased* real prices paid to farmers for maize, and maize production and marketing are finally increasing after years of decline (see below). In addition, with USAID support the Government of Malawi has made significant policy reforms in the marketing of burley tobacco, another major cash (export-oriented) crop, which can now be grown and sold by smallholder farmers.

The Problem

- Steady 15-year *decline* in per capita food production.
- Land is *crowded* (255 persons per square kilometer) on arable land.
- Land per family is *shrinking*: 55 percent of rural families have less than 1.0 hectare; 25 percent have less than 0.5 hectare.
- Given current technologies, less than *1.5 hectares will not produce a marketable surplus*.
- Land quality (fertility) has declined by one-third since independence (1964).
- Quality of life of an average family:
  - 15 percent of babies never reach age 1;
  - 35 percent of all children never reach age 15; and
  - 50 percent of all children over age 5 are chronologically stunted.
- Only 25 percent of farmers can afford to buy fertilizer.
- Only 14 percent of maize is of the high-yielding varieties.
- Maize occupies 74 percent of food crop area and provides 75 percent of the nation's calories.

Action Required

- *Farmers must have the right to grow the most lucrative cash crops* and to receive market-determined international prices for their produce so that *they can increase their incomes and raise their standards of living.*

Solution

- USAID closely collaborated with the Government of Malawi in *identifying policy changes* that have helped to arrest significantly the deterioration in the quality of life.

Results

- Farmers are obtaining access to production quotas and international prices on a crop (tobacco) that gives 6 to 10 times the return of high-yielding varieties of maize and 8 times the labor absorption of corn.
- Pressure is being exerted by small farmers for adequate and timely supplies of fertilizers.
- Increased income is spent on inputs to further increase yields and raise incomes and on other items such as school fees, trucks, bicycles, land surveys (estate status), and food purchases.
- Girls have increased access to education.
- 7,400 small farmers are marketing a high-income-earning crop now:
  - 10 percent of the farmers are women;
  - 54 percent of the farmers own less than 1.5 hectares of land;
  - 27 percent of the farmers own less than 1.0 hectare of land;
- It is anticipated that an additional 23,000 farmers are requesting quotas for the next crop, which is valued at $14 million:
  - 14 percent of the farmers are women;
  - 67 percent of the farmers own less than 1.5 hectares of land.

Dick Cobb: "Comments on the Draft Action Memorandum"

I appreciate the opportunity to come here and address you today. The Action Memorandum is an impressive and ambitious piece of work. However, there are still two major questions that are going unanswered:

First, *where is Africa in terms of its agricultural transformation?* Related to this question, how much do we understand about that transformation, and how should this transformation affect our programs?

Second, *what kind of transformation is taking place in Africa relative to the trends of broad macroeconomic growth?* Where is the link between the agricultural transformation and the rest of the economy?

I have some specific, additional comments on the Action Memo:

1. *A demand-driven approach seems to imply that there is no problem with the development and dissemination of technology. Is this true?*

   [*Jeff Hill:* The International Agricultural Research Centers (IARCs) have not been demand-driven. There is a problem with the approach and focus of past efforts in agricultural research, with inadequate attention to research on products and commodities for which there is a high demand. Even research or technology development and transfer must be demand driven.]

2. *To what extent can we rely on the private sector to conduct and fund agricultural research?*

   [*Tom Herlehy:* We are beginning to see some examples emerging in Africa. For example, during our trip to Uganda in April 1992, Jeff Hill and I learned that:
   - The private sector in Uganda is funding adaptive research on mulberry bushes (silkworms and silk development) and for ornamental plants and flowers; and
   - A donor-funded (UNDP) Chinese techni-

cian and a private entrepreneur are doing applied research on the entrepreneur's farm to improve vanilla seed multiplication and vanilla production techniques.

There may be other examples of this trend in Uganda and elsewhere in Africa. It is an early trend, but it is happening and USAID should encourage and support it.]

3. *Some USAID Missions say that the real constraints are roads and other infrastructure for transport. Other Missions say it is the policies. What is the key constraint? Where are the opportunities for improvements?*

   [*Tom Herlehy and Jeff Hill:* It really depends on the commodity system and at which stage in the development process the commodity system may be in that specific country.]

4. *The DFA advocates a sectoral approach to economic development—in agriculture, education, population and health. This is our advantage in development assistance programs, especially when compared with institutions like the World Bank.*

   But how can we link that sectoral change with broad macroeconomic growth? How do we make the connection, especially in terms of the Country Program Strategic Plan (CPSP)?

5. *Which policies are the best? And how do we measure progress in implementing these policies?*

6. *Do we, in USAID and the Africa Bureau, have the capacity to do all this with our current direct-hire Foreign Service and General Service staff?*

   I would suggest that we do not have the capacity and that we must work with other donors, with consulting firms, the World Bank, the university community, and private U.S. agribusinesses to achieve these goals and objectives.

7. *The Africa Bureau's* A Strategic Framework for Promoting Agricultural Marketing and Agribusiness Development *was very well received in the field. At the annual Mission Director's Conference in 1992, I recommended that the Directors use this document.*

   As a result of my recommendation, the USAID/Ghana Mission used it for the design of its Ghana Trade and Investment Promotion (TIP) Program. The Mission Director, Joe Goodwin, said that it was a great help to them in the process of thinking about the TIP Program and designing the TIP.

Alison Rosenberg: "Comments"

Thank you for extending me this invitation to address you during my first week as the Assistant Administrator of the Africa Bureau. I am very glad to see that the Action Memorandum *links agriculture with the private sector and with policy reform. This is a clear step above and beyond what I had expected* to find in the Africa Bureau and among ADOs based on my experience with USAID back in the early 1980s.

Now comes the hard part: how are we going to nail down a realistic plan so that we can move ahead and implement the Action Memorandum.

Joan Atherton: "Comments"

The Action Memorandum is good material for the Bureau DFA Action Plan. I should caution you, however, regarding one recommendation. There are five sectors in which USAID and the Africa Bureau have been working: agriculture, health, education, population, and financial.

Unfortunately, *the General Counsel (GC) office does not believe that the Africa Bureau should be putting resources into the financial sector.* This may affect your programs for the future.

July 17, 1992 (Friday)

Theme: The Africa Bureau Reorganizatoin and the Field

Session 1: USAID/W AND USDA RESOURCES TO ASSIST THE FIELD MISSIONS

Purpose of the Session:
To discuss with the field how to implement the ADO Conference ACTION MEMORANDUM.

Moderator: Curt Reintsma, ADO, USAID/Lesotho
Presentations: Ben Stoner, Chief, AFR/ARTS/FARA: "The FARA Analytical Agenda and the PARTS Project"
Warren Weinstein, Director, AFR/ONI: "AFR/ONI Technical Assistance Services for the Field"
Mary Picard, R&D/WID: "Support to Missions on Women in Development (WID) Issues"
David Johnston and Thomas Mehan, R&D/EID: "R&D Bureau Offices Services"
Frank Fender, USDA/OICD/FID: "USDA Agribusiness Support Services for the USAID Field Missions"
Robert Wilson, USDA/OICD/DRD: "USDA/OICD Support Services for the USAID Field Missions"
Louise Jordan, USAID/OIT: "USAID Training Opportunities"

Ben Stoner: "The FARA Analytical Agenda and the PARTS Project"

Recently, the AFR/ARTS/FARA office completed the scopes of work for our FY 1991 funded research and analytical activities. Most of these research and analytical activities have been defined and developed in coordination with you, our field ADOs and the other relevant field Mission staff.

The FARA Analytical Agenda document will be pouched to everyone. We urge you to read it and comment on it. We look forward to working with you on these research and analytical activities.

The primary purpose of many of these research and analytical activities is to help you, the Missions, with your Impact Monitoring and Reporting, such as through the API process. However, other research and analysis is designed to build the information and synthesize the lessons learned, which we need to design more effective and sound development projects and programs.

We will be funding African Fellows under the Policy Analysis, Research, and Technical Support (PARTS) project. This is one approach we are taking to involve actively Africans in the research and analysis that we are doing and to help institutionalize the analytical work and its results within Africa.

We look forward to collaborating with you on this innovative program and in many other areas in the coming year.

Warren Weinstein: "AFR/ONI Resources to Assist the Field"

While we are collaborating with AFR/ARTS on its research and analysis, our own office—AFR/ONI—has a different mandate: *We support and promote transactions.*

We are especially concerned with generating more foreign investment and trade for Africa.

AFR/ONI is using the International Executive Service Corps (IESC) and Volunteers in Overseas Cooperative Assistance (VOCA) on investment and trade Missions.

AFR/ONI now has a USDA RSSA agreement to provide more services to the field. (In April 1992, a cable went to the field describing these services).

U.S. firms want trade and investment in Africa: one example is the interest expressed in sesame in The Gambia; another is a tannery in Mali.

AFR/ONI is using the Private Enterprise (PRE) Bureau fund for integrating regional markets with international markets to assist USAID Missions in Africa.

AFR/ONI will soon have new staff: Jim Vermillion is coming in to join the office, as will Skip Kissinger from USAID/Jamaica.

Mary Picard: "Women in Development Support Services to Missions"

In the design of projects and programs aimed at improving the efficiency of marketing systems, the special responsibilities and roles of women farmers and marketers are often ignored or overlooked. As a result, projects may not be as effective as they could. R&D's Women in Development Office is designed to assist Missions and Bureaus to correct these common oversights, and, in so doing, to enhance the effectiveness of projects.

Women in Development Assistance and Services

A wide array of technical assistance and other services is available to you and your missions from the WID Office. Resources are available on a 50-50 matching-fund basis. Missions can also buy into the *GENESYS Project* for technical assistance and training services.

R&D/WID has a first-rate core technical staff based in Washington available for TDYs to Missions to assist on items of special priority. Missions make use of this service at all levels.

The R&D/WID staff is often called on to assist in integrating gender into monitoring and evaluation mechanisms. They are also available to assist with portfolio reviews, defining strategic objectives, and designing specific projects—particularly those in marketing, trade, and processing agricultural products—so that the needs of women are addressed.

WID Research, Information, and Resources

The R&D/WID Office maintains a quick-response information and communications center, ready to provide documentation and information on gender issues in agricultural marketing and agribusiness experiences worldwide.

The WID Office also commissions research into topics of interest to missions and bureaus. For example, through the Agricultural Marketing Improvement Strategies (AMIS), Appropriate Technology International (ATI), and the Marketing Developing and Investment (MDI) projects, the WID Office has funded studies on course grain processing in Mali, oil pressing in Tanzania, and horticultural exports from The Gambia and Ghana.

Women in Development Training

Training programs offered by WID are state-of-the-art and can be tailored to fit the specific needs of a mission. These sessions have been extremely well received, most recently by Missions in Mali, Rwanda, and Uganda.

Beyond familiarizing USAID personnel, NGOs, and local government agencies on the basics of gender analysis, these training programs usually include hands-on technical assistance with project design, implementation, or WID strategy planning.

Contacting the WID Office

If you'd like more detailed information on resources available through the WID Office, you may contact Nina Bowen, the Africa Bureau liaison, or the Office Director herself, Mary Fran Freedman. Attending this conference is also Mary Picard, coordinator for the WID Office, who would no doubt welcome your inquiries.

- Mary Fran Freedman (SA-18, Rm. 714): tel: 703-875-4668; fax: 703-875-4633
- Nina Bowen (SA-18, Rm. 714): tel: 703-875-5508; fax: 703-875-4633
- Mary Picard (1111 19th Street, Rosslyn, VA): tel: 703-235-9090; fax: 703-235-9086

Tom Mehan and David Johnston: "The R&D/EID Bureau Approach"

We are using new approaches, such as working with U.S. agribusiness trade associations and experimenting with the idea of business and industry incubators.

The AMIS project has provided a lot of technical and analytical assistance to the field. We will be designing a follow-on to that successful project and welcome your ideas and suggestions for the project design so that it serves your field needs well.

There are many other centrally funded R&D projects with buy-in capacity for Missions, and these are discussed in the booklet that we have brought here to the Conference for distribution.

Bob Wilson and Frank Fender: "USDA Support Services"

The Resource Support Services Agreement (RSSA) with USAID Africa Bureau offers technical assistance and policy analysis assistance. There will soon be 27 new USDA RSSAs on assignment to work with USAID R&D Bureau.

USDA offers technical assistance to help with extension and marketing services. In Morocco, USDA helped the USAID Mission to organize a workshop and put together a Trade and Investment Mission to bring U.S. agribusinesses to Rabat.

In addition, USDA has the ability to put on some of its courses out in the field, such as was done recently in Kampala, Uganda, for the USAID Mission.USDA/OICD, Pat Wetmore, the head of our Technical Inquiries Group, is on "E-mail" now. She and her dedicated staff are ready to assist Missions in getting the technical information that you need to help promote production, marketing, processing, and innovation in the agricultural sector in Africa.

Louise Jordan: "The USAID Office of International Training (OIT)"

CID/OIT offers training for USAID. There is a five-year contract in place.

Entrepreneurs International is one example of a highly successful training program administered by OIT, which has been highly recommended by Warren Weinstein (AFR/ONI), among others.

Session 2: OPPORTUNITIES FOR TRAINING AND CAREER ADVANCEMENT FOR THE AFRICA BUREAU AGRICULTURAL DEVELOPMENT OFFICER

Purpose of the Session:
To provide information to the ADOs regarding training opportunities for career enhancement.

Moderator: Darrell McIntyre, ADO, Mozambique
Presentations: Jerry Jordan, Director, USAID/AFR/MRP
Chuck Rheingans, USAID/HRDM/SCD/CD
Doug Broome, USAID/HRDM/TSD/PS
Comment: John McMahon, ADO, USAID/Cameroon

Jerry Jordan: "The USAID Reorganization and the ADOs"

USAID and the Africa Bureau are being affected by the need to reduce the number of employees. Thus there is, in effect, no new recruitment. Last year, only 39 new people were hired by USAID and 15 International Development Interns were hired, for a total of 44 new USAID employees in FY 1992.

Some of the smaller Missions are especially being targeted for further reductions. For example, one Mission with a $3 million DFA program requires $1 million in operating expenses (OE) to administer that program. Congress and the USAID Administrator are critical of such expenditures and will try to redress this imbalance in the future.

Chuck Rheingans: "Career Options for the ADO Officer"

USAID has added development programs in 8 new countries between 1985 and 1992, and this year will be adding 12 new countries (among the New Independent States, Eastern Europe, Ethiopia, and Angola). But we are expected to administer programs in those 20 new countries with fewer people and fewer OE resources than the Agency had in 1984.

Since 1965, there has been a decline in ADO (Backstop 10) positions, falling from a high of 217 to 181 in 1990, and to 148 in early 1992. Today, there are only 155 BS 10 employees in USAID.

Twenty-seven BS 10 staff have moved from the Agriculture Office to other slots in USAID, such as the Program Office, General Development Office, Program Economist Office, Private Sector Office, and Project Development Office, leading to a shortage of positions while there is a surplus of staff.

We encourage ADOs to move to other BS positions to secure promotions. The General Development Office position, especially, will have many new opportunities in the future.

August 18, 1992: selection boards meet for new staff hiring.

Douglas Broome: "USAID Training Office"

USAID cuts in the total training budget are endangering the ability of the staff to design and manage programs. There are virtually no technical courses for ADOs scheduled for this year. The most recent training opportunity for ADOs was the ADO State-of-the-Art Workshop at Cornell University in June 1990.

However, there will be an agency-wide training opportunity: an Environmental Training workshop planned for August 1992.

USAID is providing less technical training and more cross-disciplinary training, especially for staff in the following offices: Program, Budget, Project Management, and the ongoing Development Studies programs. How can we train people? With even fewer staff in our offices and in the Missions, how can we release someone to go for training, especially for more than a week?

Thus, total participation in training is down. Even the centrally funded course on the environment has not yet been filled.

ADOs are technical specialist, but they are also general development managers of projects and programs, as reflected in the Action Memo and as we have heard at this Conference.

In-country or regional training (i.e., East, South, or West) in Africa may be one way to make it easier for Missions to fund and release staff for training.

A challenging job does not necessarily equal the fast track to promotion.

Career Enhancement Principles

1. *The importance of having a challenging, satisfying job.* The most important career-enhancement incentive for the majority of employees in USAID is having a job that is challenging, satisfying, and at the some time permits the employee to grow.

2. *Career enhancement is good management*. The most important resource in the Agency is its employees; one can maximize the potential and productivity of employees and, in so doing, achieve the results that the Agency desires through a culture that values career enhancement.

3. *Key responsibility for career enhancement rests with the employee*. The employee's supervisor and the Agency must be there for assistance and to provide a supportive climate, but the employee must be the one to take the initiative.

4. *There is no one appropriate "career path" in USAID*. How an employee evolves in his or her career will depend, in part, on:

   – the individual's talents and abilities;
   – the opportunities that come the individual's way;
   – Agency priorities; and
   – the individual's personal interests and perceived needs.

5. *Career enhancement does not equal advances through promotions.* Building a career in USAID might mean seeking maximum growth and satisfaction in one's current job, moving laterally to other jobs in the Agency at the some career level to gain new skills, taking a short-term cut in status and pay for long-term career enhancement, or even preparing oneself (if suitable opportunities don't exist within the Agency) to move to a more challenging job outside the Agency.

Career enhancement is good management: it motivates employees to be maximally productive and in so doing contributes to the achievement of results with accountability.

Problems within USAID Regarding Career Enhancement

1. Career enhancement is not valued as an Agency priority.

2. Criteria for professional advancement and assignments are not seen as transparent, equitable, and predictable.

3. There are limited training opportunities that are not fully in accord with employee's career development needs.

4. There are limited career opportunities for technical officers, Foreign Service Nationals, secretaries, women and minorities.

Accomplishments to Date, Proposed Solutions, and Timetables

1. *Establish career enhancement as a key Agency priority.* Career enhancement, if it is to be valued, requires broad support throughout the Agency. Critical to achieving this support is that senior management set the tone.

   To start the process, the Administrator will be asked to sign off on an Agency-wide notice, to be cleared by the Assistant Administrator for Operations and other senior managers, establishing career enhancement as a key Agency priority. (The target date for letter to go out is September 1992.)

2. *Developing criteria for professional advancement and assignments that are open, transparent, and predictable.* Matrices providing descriptions of functions at different career levels along with essential competencies required to perform at each level have been prepared for:

   – the technical and/or managerial track, and
   – the secretarial and/or clerical track.

   A third, focusing on the administrative and/or operations track, is in preparation.

   Matrices can be used by promotion panels to standardize decisions around promotions, by assignment boards to assist in making assignment decisions, and by individuals in visualizing their potential progression in a given career track. (The administrative and/or operations matrix to be completed October 1992.)

   Proposed revisions to the assignment system, focusing on increasing incentives to serve in central bureaus and difficult to place overseas posts have been approved in principle by the American Foreign Service Association. Proposed revisions also give greater weight to transparency and predictability in assignment process and to employee career development needs. (The revised assignment system to be put in place by May 1993 in time for the FY 1994–95 assignment cycle.)

3. *Training opportunities more in accord with Agency priorities and with employee career development needs.*

   At the recommendation of the OMB/AID SWAT team, steps are being taken to initiate a certification program for USAID project managers. As a first step a requirements study is being carried out to examine, based on experience elsewhere, options for initiating such a program. (The study is to be completed in October 1992, with a program to formally begin in early FY 1994.)

   Following the example set by other Federal agencies, a training program will be initiated to assist supervisors to provide career guidance to employees and to assist employees to develop their own career plans. (The scope of work is being prepared, and an RFP will be issued in October or November, with the contractor to begin training no later than July 1993.)

4. *Developing plans of action for dealing with special need groups.* This is a major task, which requires an in-depth review of problems faced by technical officers, Foreign Service Nationals, secretaries, and women and minorities, and the proposal of solutions to these problems. (The work will commence by September 1992, with initial plans of action to be ready by April 1993.)

Issues for Discussion

1. *Career-enhancement activities, to be effective, require broad-based support from throughout the Agency.* This support must begin with the Administrator and his/her senior staff.

2. *Increased resources are needed for training.* Under current budgetary restrictions trade-offs must be made in the composition and balance of Agency training portfolio (e.g., between programs such as project certification recommended by the SWAT team and other priority training programs) and in

time frames for carrying out priority training activities.

John McMahon: "Comments"

Sustainable resource management and agribusiness development are two critical areas for USAID programs. Therefore, there should also be more training opportunities in those areas.

Success

- ADOs have "development management" skills and knowledge.

Improvements

- To improve the opportunities for our ADOs, we need to answer the following questions:
  - How can we do more work with less staff?
  - How can we use more contractors to get the necessary work accomplished?
  - How can we organize at the Missions so that our staff can attend training courses?
  - How can we use more program funds for training or "piggyback" on Central funds.

- We have good management skills, but they need to be updated regularly with new approaches and new techniques, through more training.
- The agency should offer more incentives and rewards (e.g., promotions) for people who have undergone specific training.
- We should keep our resumes and SF-171s up to date, so that all training is reflected on them.

Session 3: CLOSING SESSION

Purpose of the Session:

To provide ADOs an opportunity to discuss individual Action Plans based on the results of the Conference and ADO Conference ACTION MEMORANDUM.

Moderator: Ben Stoner, Chief AFR/ARTS/FARA

The Action Memo

1. ADOs have shown commitment and integrity.

2. Bringing in outside people to facilitate the Conference sessions helped us.

3. Send out the Action Memo to the field whether or not it gets endorsed by senior administration. It will improve morale.

Suggestions for Improvements

1. The Sunday dinner and speeches set too negative a tone to start the Conference. Many of today's speakers also set a negative tone.

   While we know that there is bad news in a lot of what is going on in USAID these days, there is more good news than bad and that should have been the message to us.

   The speakers should have been more positive.

2. We need better-trained people to have a bigger "people-level impact" in our development programs. The Agency should fund training.

3. We should encourage and promote Americans and Africans to trade and to form joint ventures or even just have discussions about agribusiness management and marketing techniques and opportunities.

4. Convene the next ADO Conference in Africa.

Recommendations

1. The Agency, especially Personnel, needs to recognize that the profile of ADOs has changed. We are managing policy reform and agribusiness development programs. Write into the Agency Personnel "system" these new tasks and publicize this to the Mission Directors.

2. Senior bureau management needs to motivate the staff: the ADO Action Memo is one way to create a new, inspiring, motivated vision for Africa.

3. Connect the conference vision statement to ADOs' official range of responsibilities; we are managing the development process as well as providing general technical advice: we can function as good as, if not better than, the "generalists."

4. Focus is and should continue to be sustainable development with private-sector involvement.

5. Use regional DH FS staff in managing programs: this will cost less than using USAID/Washington and lots of "piggybacking" can go on for trips, etc.

6. Why do we still call ourselves ADOs? What is a Backstop 10? We should change our titles to (Agricultural) *Sectoral Managers* and not emphasize the technical specialties if that is what it will take to get more credit for what we can do.

7. Our Employee Evaluation Reviews (EERs) should reflect the management work that we do and the breadth and variety of the functions we perform.

8. For the assignment process: prepare better resumes and SF-171s, reflecting the breadth of our USAID and non-USAID experience.

9. We need to identify how we can influence decision makers other than by bringing them to conferences, such as we did yesterday.

10. How can we tell "our own story" better?

11. We need more information, specific information, in bullet format, on who does what? When? Where? etc.

12. We should share information on practices for generating more capital for agribusinesses.

13. The Africa and R&D Bureaus need to improve coordination in the same areas of effort.

14. We need to improve the information we get on buy-ins that are available to the field from USAID/W.

15. We should analyze more carefully the influence of transportation on generating improvements in agricultural productivity and marketing results.

16. We should work together to screen consultants before sending then to the field and develop some basic criteria to help each other out on this.

Innovations

1. Capital market development in Africa needs study: AFR/ONI is already working in this important area with Price Waterhouse and Harvey and Company, as are USAID/Ghana, USAID/Tanzania and Kenya. We need to share information on this new approach—what works and what does not work.

2. Rational businesses laws are needed.

3. Equity and/or venture capital firms need further study as a means to bring more resources to agricultural marketing and export efforts.

4. The Gambia, Tanzania, Ghana, and Kenya are buying into Private Enterprise Bureau projects in this area; monitor and report to the rest of us on these developments.

5. We should explore other new approaches, such as working with and supporting trade associations, to help agribusiness and agricultural marketing development.

6. We should be looking at markets other than United States, such as sesame to the Middle East and high-value horticulture to Europe.

7. AFR/ONI should compile and disseminate a list of U.S. agribusinesses and agricultural marketing or trade associations that are active in Africa.

8. USAID/W should support more agribusiness investment missions to get more capital inflow and more trade going on between Africa and the United States.

Appendix 1

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Appendix 3
Conference Planning Suggestions

The Planning Committee for the 1992 USAID ADO Conference believes that other groups planning such conferences could benefit from our experiences. Therefore, we have put together some suggestions below for future conference planning groups.

1. *Set the right tone the first day at the first moment.* We tried to establish an *open, relaxed, optimistic, and up-beat tone* with the Sunday dinner. We encourage planning committees to work closely with their speakers to ensure that the opening remarks set the appropriate tone to get the Conference off on the right foot.

2. *Seating.* We found it preferable to allow conference participants to mingle and sit where they wanted to, especially at the opening night dinner. This helped get conversations going and allowed old friends to get caught up on each other's news. During the sessions, we provided for informal seating arrangements to encourage a relaxed and open atmosphere, which facilitated more critical dialogue and frank discussion of the issues.

3. *Scheduling the sessions.* We found that the coffee breaks and lunch breaks were one time when conference participants really enjoyed getting together and interacting with one another. However, we only programmed for one morning and one afternoon 15-minute coffee break and a 60-minute lunch.

   We would *recommend making more time for these breaks* to encourage the informal networking that helps makes such conferences a real success for the participants.

4. *Formal sessions.* We found that by *specifying a purpose for each session*, we helped the speakers and the participants keep the presentations and the question-and-answer sessions sharply focused. These purposes were included in the Conference schedule.

5. *Break-out groups.* We found that the break-out groups, on the whole, were most successful when the groups had *specific issues or questions* to discuss and had to come up with recommendations to share with the rest of the group. The *more information* the break-out groups were given during the formal sessions, the *more successful and interesting* were the results from the discussions.

   Keeping the discussions *focused* was an important ingredient in their success. Having a facilitator in each group, someone to lead the discussion and to be sure that all points or issues were recorded for reporting later, also contributed to the success of the break-out groups.

6. *Facilitators.* We anticipated that many good points would be made during question-and-answer sessions, so we had several people (a minimum of two but often four) stationed at flip charts where they could record what the participants were saying.

7. *Conference conclusion.* In addition to having a purpose for the Conference and for each session during the Conference, we set the goal for the participants to come with an Action Memorandum at the end of the Conference.

   The purpose of having the participants draft an Action Memo was to ensure follow up after the Conference ended and to ensure that some general agreement was reached among the participants and between the participants and the management of the Africa Bureau on what we need to do next.

This was a useful tool to keep the participants and the conference focused on the issues.

8. *Daily announcements.* We made daily announcements, usually at the start of the first session, regarding any changes in the schedule or in speakers, etc.

9. *Suggestions box.* We encouraged everyone to make suggestions in person or through a suggestion box on any matter, whether procedural or substantive, to make the Conference sessions more pleasant for everyone.

10. *Guidelines for conference participants.* We drafted some guidelines to help the participants during the Conference. This included suggestions for speakers, moderators, rapporteurs, and facilitators. These guidelines were especially helpful to the moderators and the speakers in each session. (Samples are included below.)

11. *Keeping time and to the schedule.* The facilitators kept track of the time so that we could try to stay on schedule as much as possible. We built into each session some time at the end for wrap-up, lessons learned, what we can do better, what we hope to do in the future, what USAID/W and the field Missions will do after the Conference ends.

12. *Eat and drink.* We included a list of places to have lunch and/or dinner in the registration packet of materials. For dinner, we suggested that participants who did not have arrangements to dine with anyone, and if they wanted to do so, could meet at a specific spot in the hotel or conference site at a specific time.

13. *Conference proceedings.* We requested that two-page executive summaries of the presentations be given to us for the compilation of these Conference Proceedings. Unfortunately, we discovered that very few speakers complied with this request. Many speakers left us with their notes or with long discussion papers, reports, or articles on which their talks were based.

    We would strongly suggest that speakers be told well in advance of the Conference that Proceedings will be published and that it is their responsibility to ensure that executive summaries of their findings be made available. Editing and compiling these proceedings from the vast material generated at the Conference has been an overwhelming task.

Speaker Responsibilities

Before Your Presentation

1. Prepare your presentation (and a summary for conference proceedings). Decide what you can say in the time available. Make three to five points only. Arrange points in a sequence that assists the audience to understand the topic. Know how much time you have (check with moderator).

2. Structure your presentation:

   – *Introduction:* Tell them what you are going to say.
   – *Body:* Say it. Use examples to illustrate your points.
   – *Conclusion:* Tell them what you said.

3. Prepare visuals and equipment. Make sure visuals are in order and visible throughout the room. Check to make sure equipment is available in the room where you will be presenting and that it works.

4. Test your planned presentation. Run through your presentation with a friend and ask for feedback. Make adjustments to fit the time available.

During Your Presentation

5. Relax. Be yourself. Express your own personality. Establish a pace and tone that are comfortable for you.

6. Keep in touch with the audience. Maintain eye contact. Avoid distracting behavior such as jingling pocket change or repeated "uhs" and "you know."

7. Avoid stories or humor that might offend any member of the group. Minimize your use of jargon and acronyms.

8. Distribute handouts after your presentation—not during—by placing them on the table at the back of the room.

9. Remember your time limit. Stick to your prepared points. Avoid overelaboration and going off on tangents. If you exceed your time limit, quit gracefully. If you can finish early, do so.

After Your Presentation

10. Give succinct responses to questions and comments. Make sure that you understand the question. Then respond with information, not emotion. (Facts may be more helpful than opinions.) Offer sources of additional information. Stay after the session to discuss issues further with interested participants.

11. Contribute to the workshop proceedings, as requested. Give feedback to moderators and facilitators.

Moderator Responsibilities

Before Your Session

1. Meet with session speakers to ensure that they understand their assignments and the session objectives. Discuss how speakers will be introduced, how time limits will be maintained, and how questions and comments will be handled. Ask speakers to be present at least 15 minutes before the session starts.

2. Check with speakers to determine any equipment needs and make sure needed equipment is available and functional.

During Your Session

3. Open the session. Introduce yourself. Identify the topic to be discussed and link it to previous or upcoming sessions. Introduce the speakers. Set the ground rules. Keep these remarks brief—not more than two or three minutes.

4. Manage the time. Keep an eye on the timekeeper and intervene to stop the speaker, if necessary.

5. After the presentations, open the session for discussion and questions from the floor. Assist in directing questions to different speakers. Repeat the questions. Keep discussion focused on the objective of the session. Point out areas of consensus. Note unresolved questions, information needed or assumptions made. Again, manage the time. Announce when you have time for one last question.

6. During the final 15 minutes, work with facilitator and group to record lessons learned and future actions needed.

7. Close the session by making a brief summary statement. Thank the speakers. Make announcements regarding the next session—where, when, what. For break-out sessions, clarify room assignments. Announce the time the next session is to begin.

After Your Session

8. Collect any speakers' papers that are part of conference records. Contribute to the workshop proceedings as requested.

Rapporteur Responsibilities

Before Your Session

1. Make sure you understand where and when the session will take place and its objectives. Read any background materials to become familiar with issues.

During Your Session

2. Record highlights of what is said on a flip chart. Publicly recording important points helps the group see visually what it has covered. It also allows participants to correct statements that inaccurately reflect their views.

3. Help the facilitator with monitoring of time so the group can discuss and reach consensus. Assist in integrating and synthesizing the deliberations.

4. Display key points on flip charts to facilitate reporting out in plenary session. Mark each flip chart with the date, and the names of the session leader, facilitator, and rapporteur.

After Your Session

5. Agree with group leader on who will present the verbal report of session highlights to the plenary group, and the written report to workshop organizers (if applicable).

6. Make sure notes and charts are legible, understandable, and turned in to workshop organizers. Contribute to the workshop proceedings as requested.

Facilitator Responsibilities

Overall

1. Provide guidance and feedback to workshop organizers and planning committee as workshop proceeds to ensure that difficulties are resolved and objectives are met. Report to moderators in small group sessions and Conference Planning Committee.

In Plenary Sessions

2. Serve as resource persons on workshop procedures.

3. Ensure that speakers, moderators, and rapporteurs understand their individual assignments and the session objectives.

4. Monitor the sessions. Intervene periodically to keep things moving and resolve difficulties.

5. Ensure that plenary discussion is recorded and, if necessary, chart key points.

In Break-Out Groups

5. Ensure that the task is clear.

6. Help the group develop an approach to the task.

7. Get discussion started and keep it on the assigned task.

8. Encourage broad participation (limit overactive participation) and keep discussion moving.

9. Press for decisions. Ensure that decisions are recorded to be shared in plenary sessions, and that minority views are recognized.

10. Assist rapporteurs in synthesis of key points to be reported in plenary session.